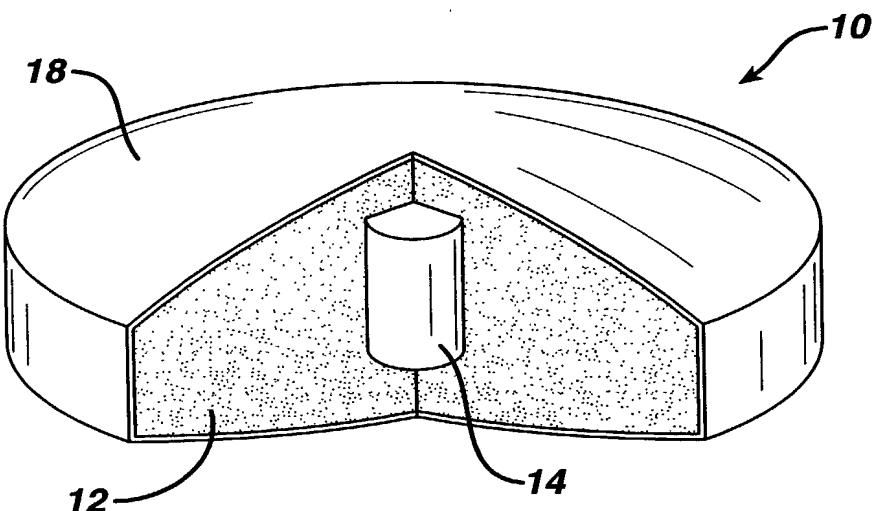


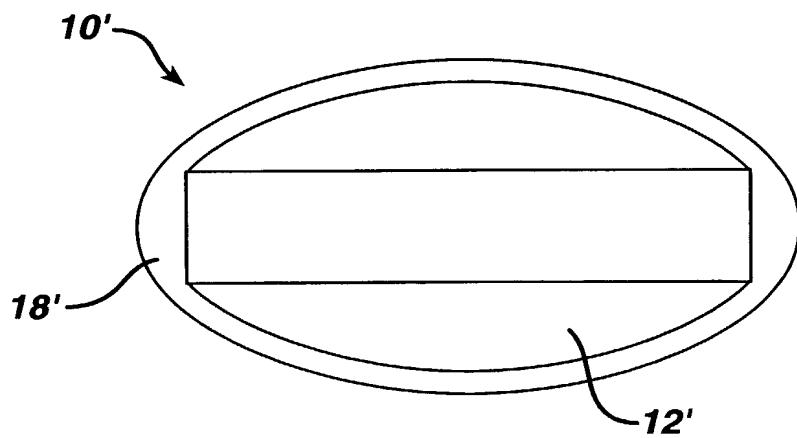
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

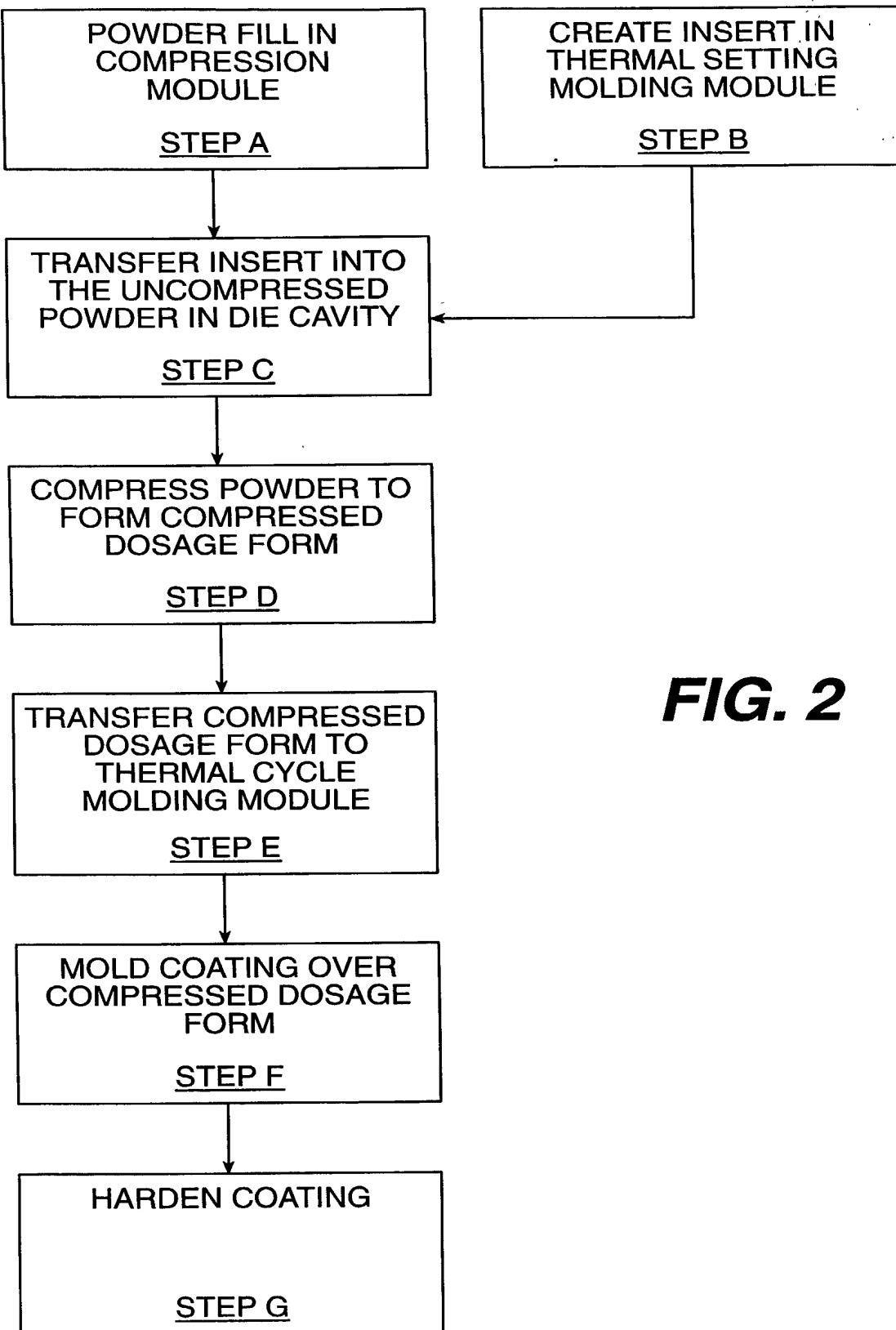
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**FIG. 1A**



**FIG. 1B**

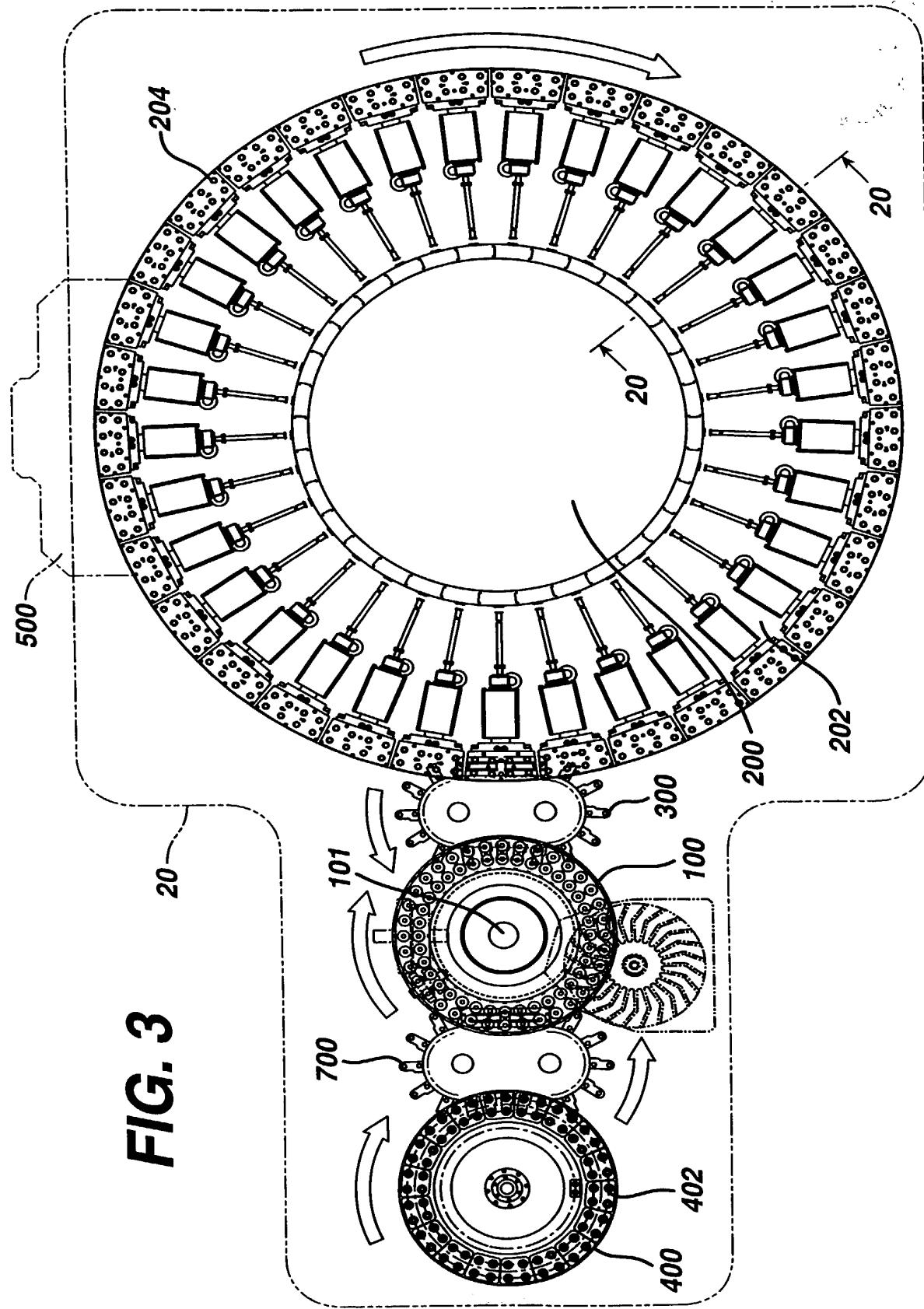


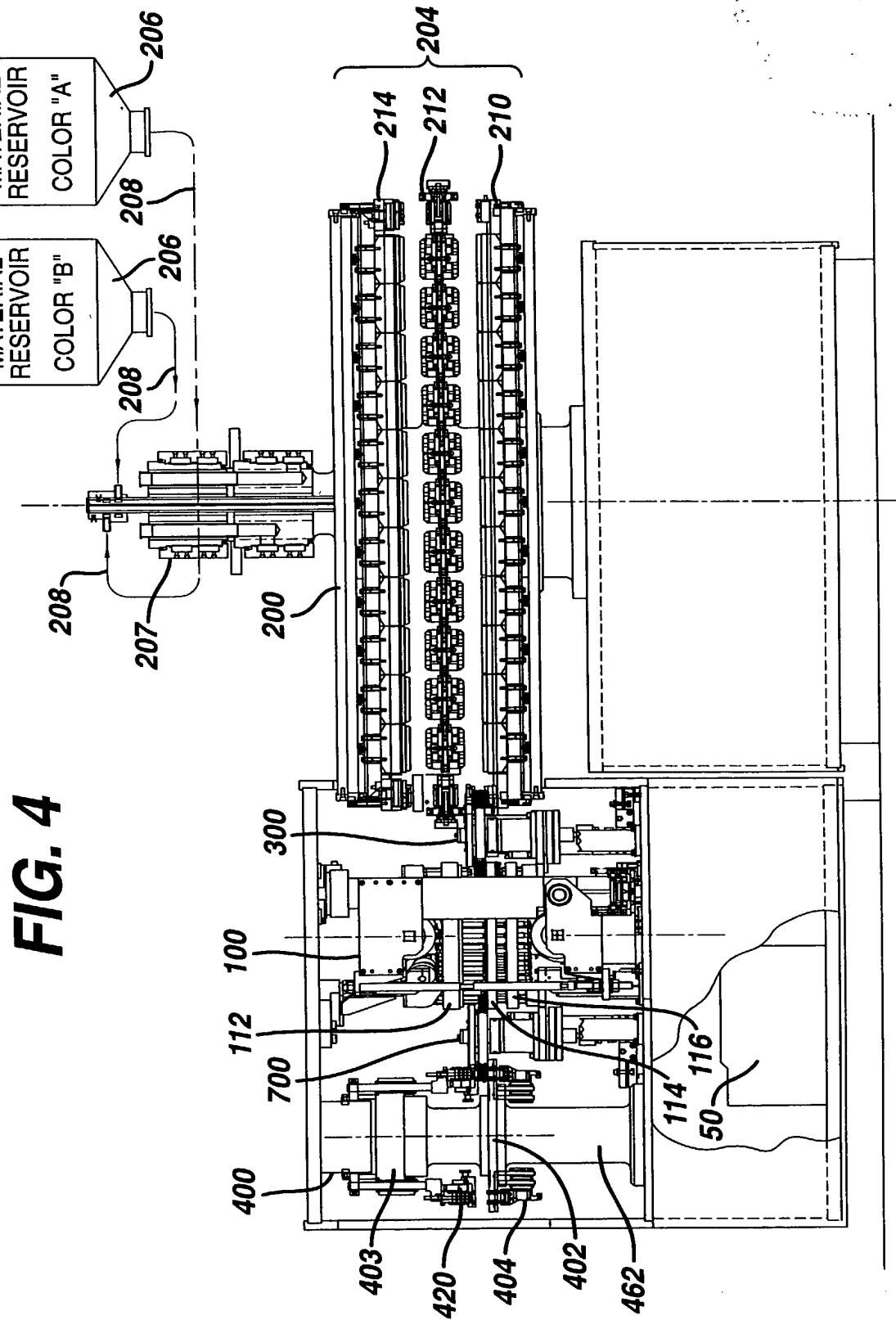


**FIG. 2**

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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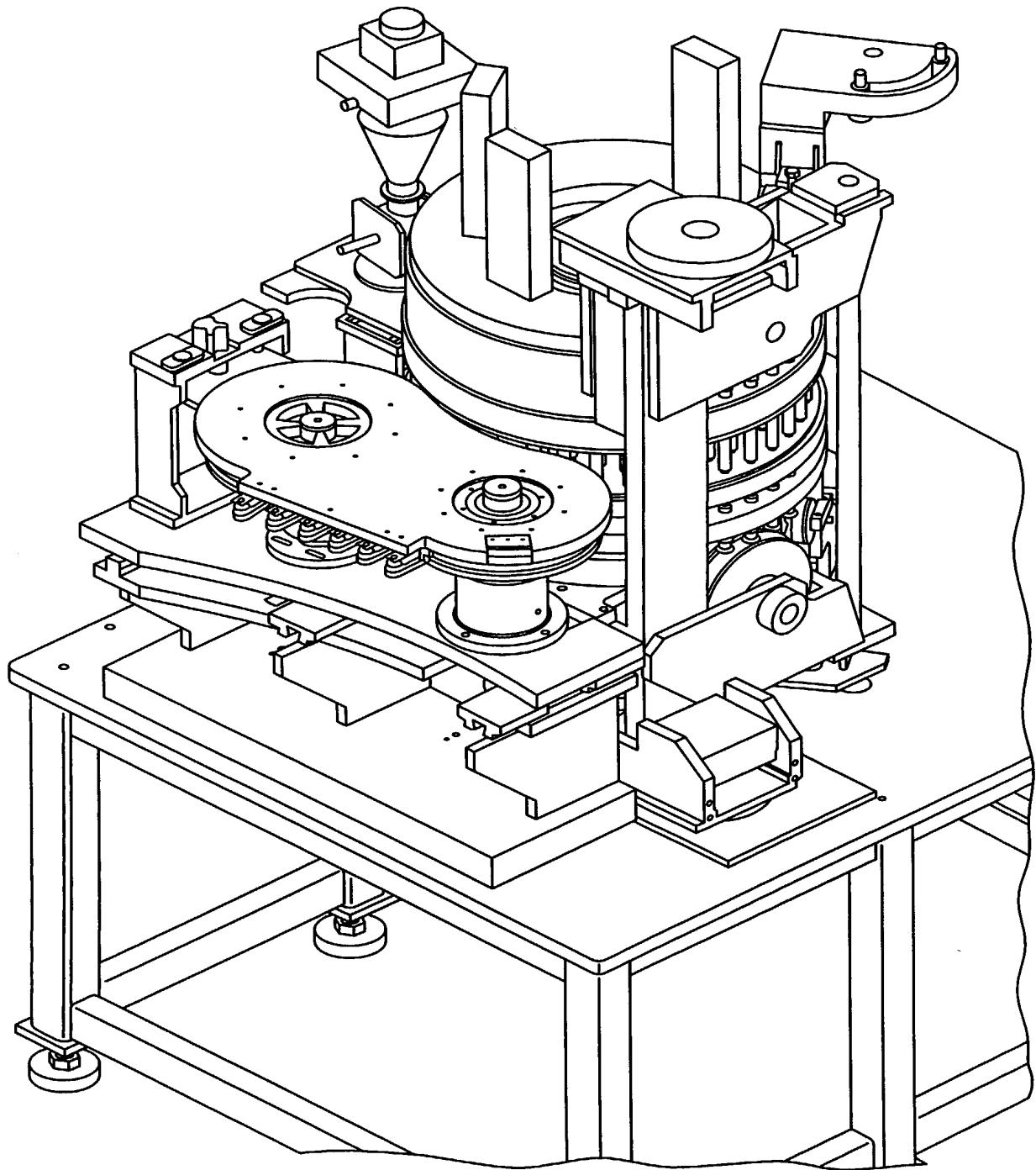


**FIG. 4**

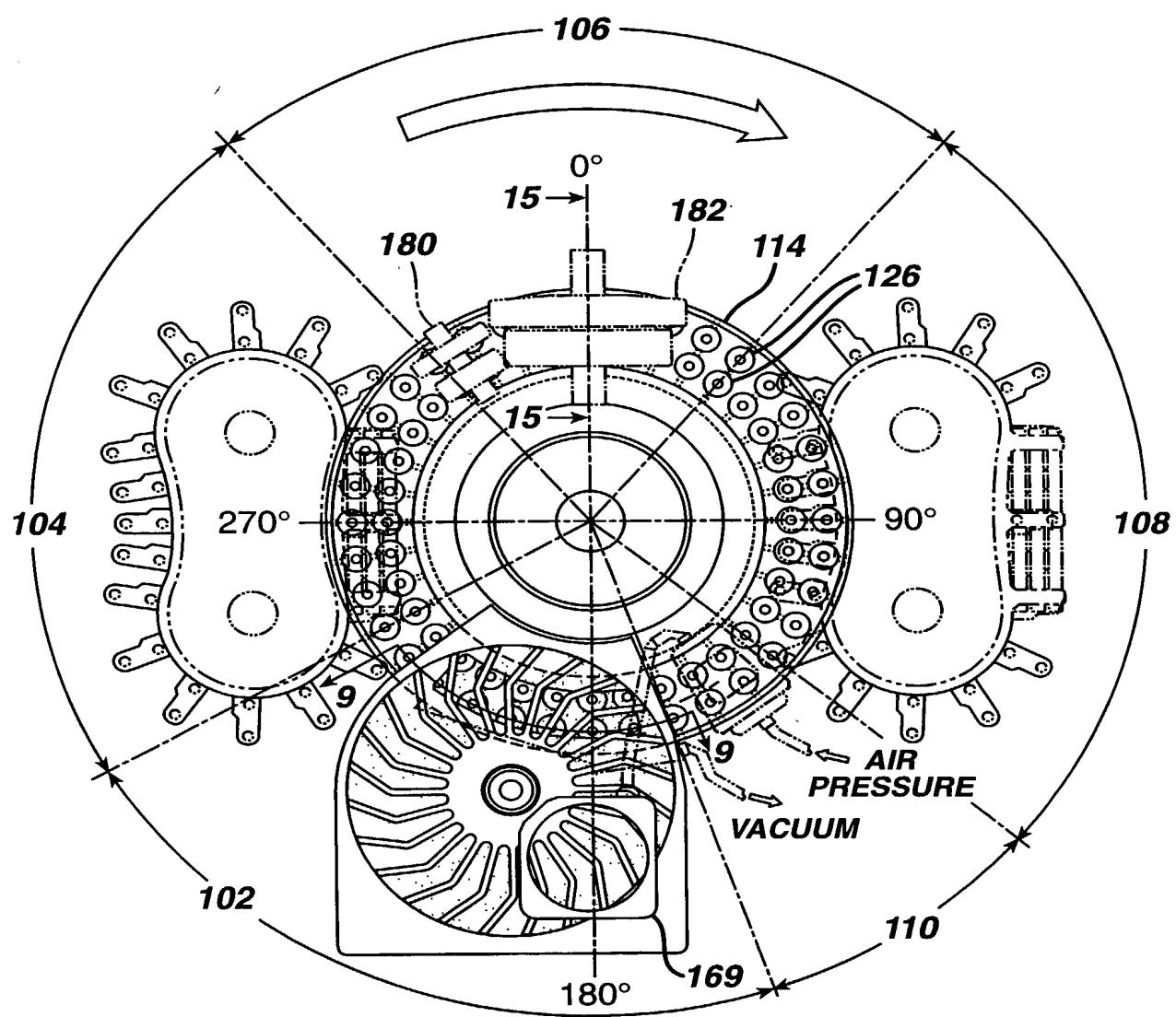
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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## FIG. 5



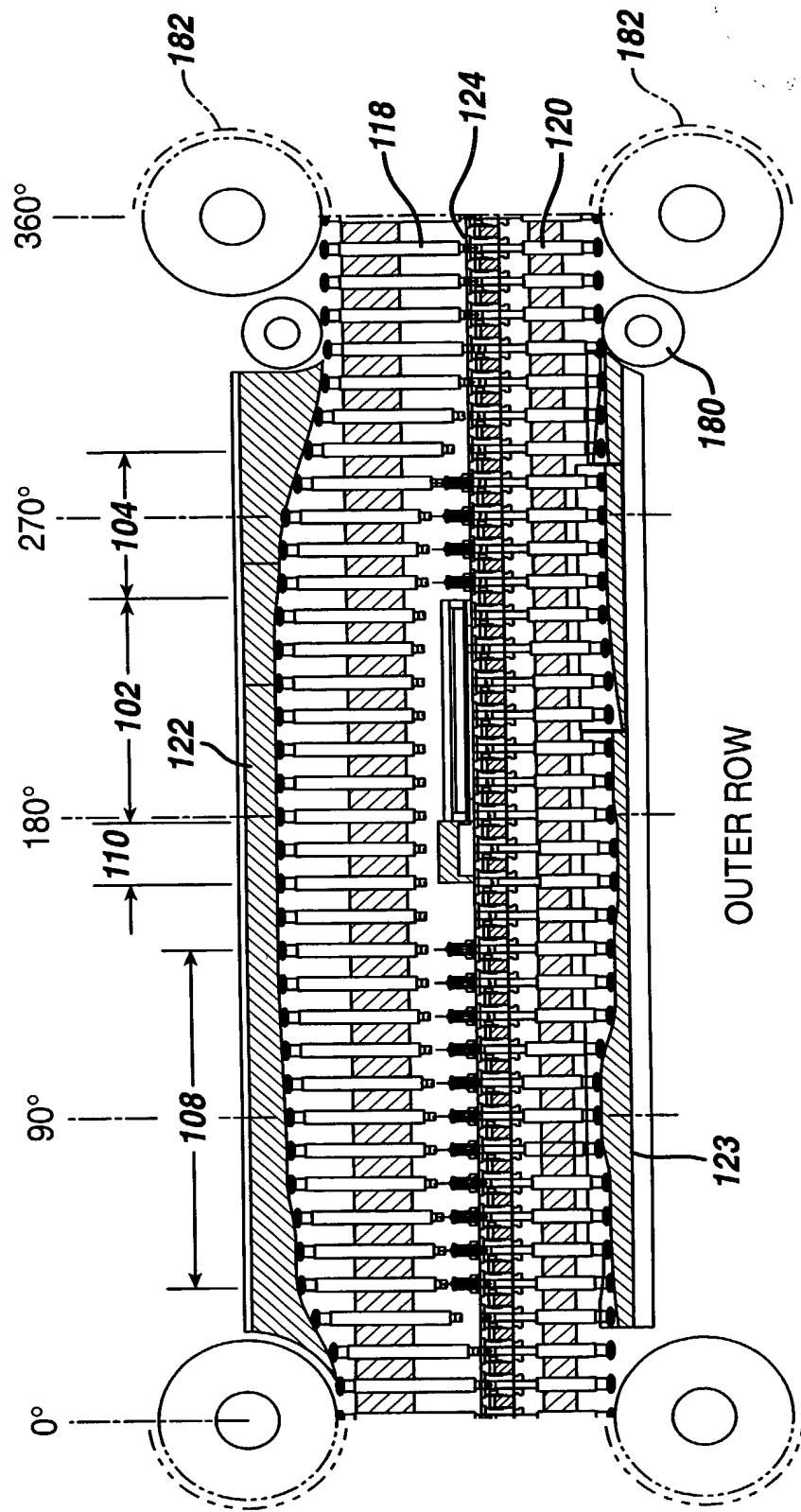
**FIG. 6**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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FIG. 7



**TITLE:** Systems, Methods and Apparatuses for...  
**INVENTOR(S):** Sowden, et al.  
**APP#:** 09/966939  
**ATTY:** S. E. Hayner      **TEL. #:** 732-524-2242  
**DOCKET #:** MCP-0242      **CUST. #:** 000027777

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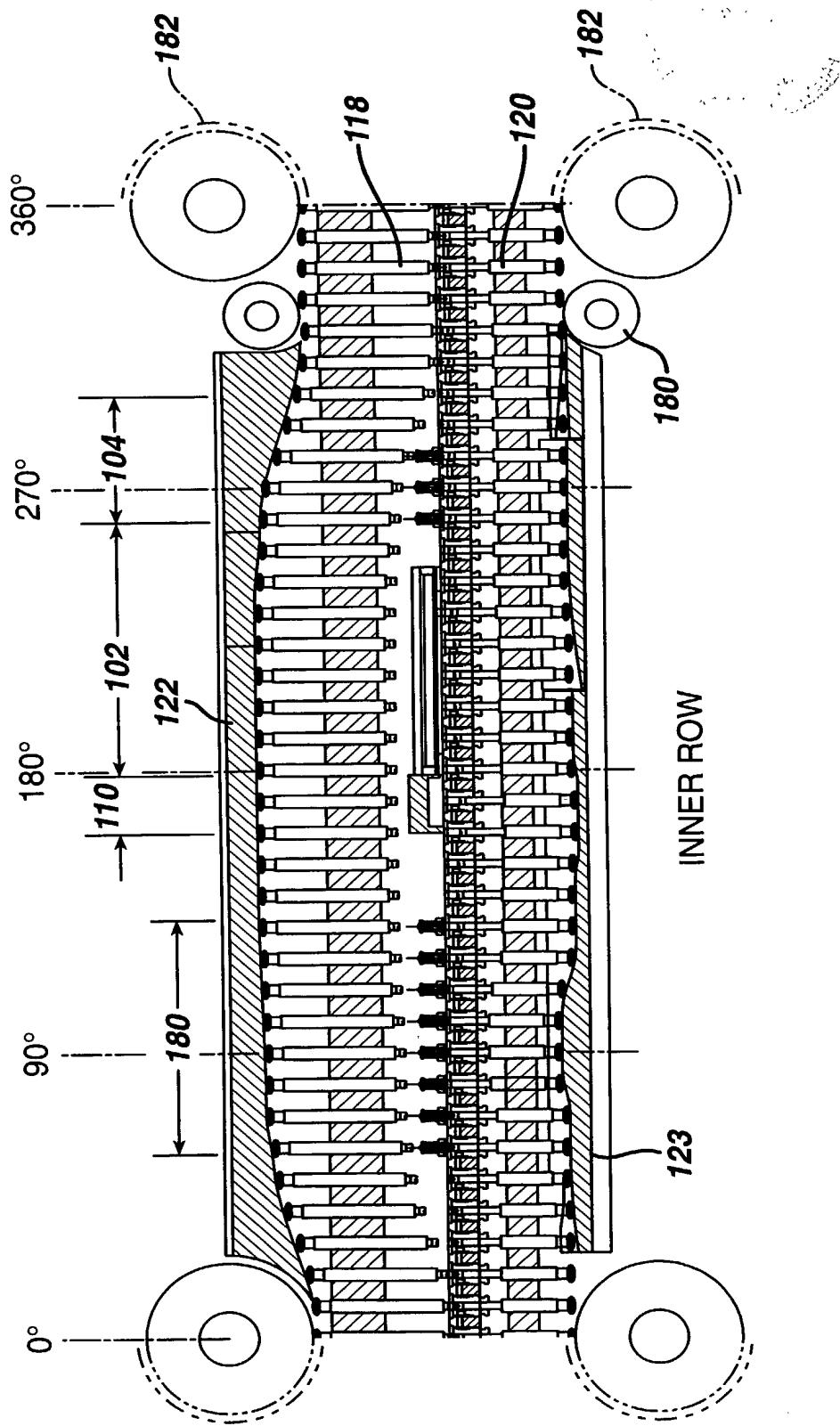
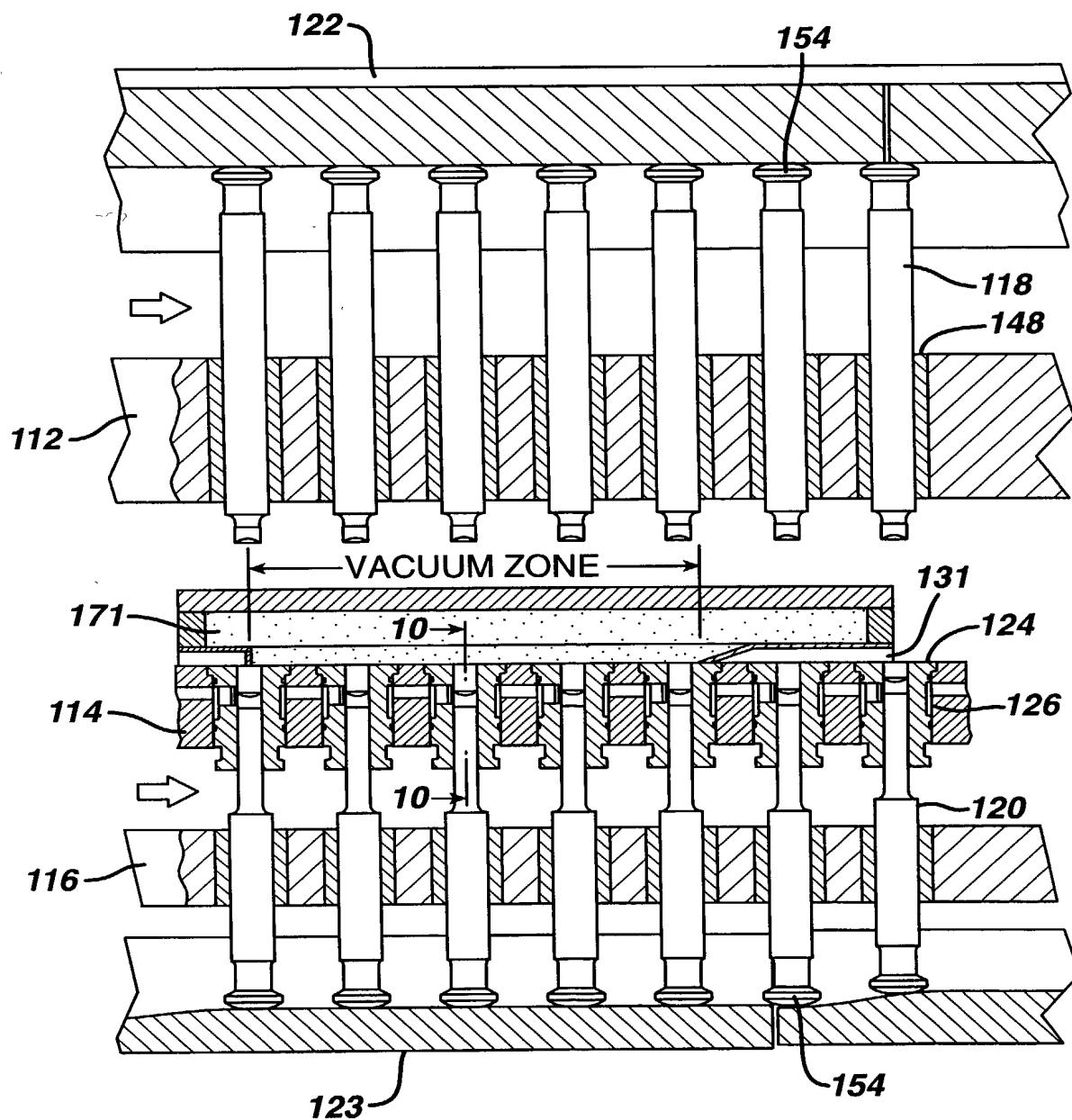
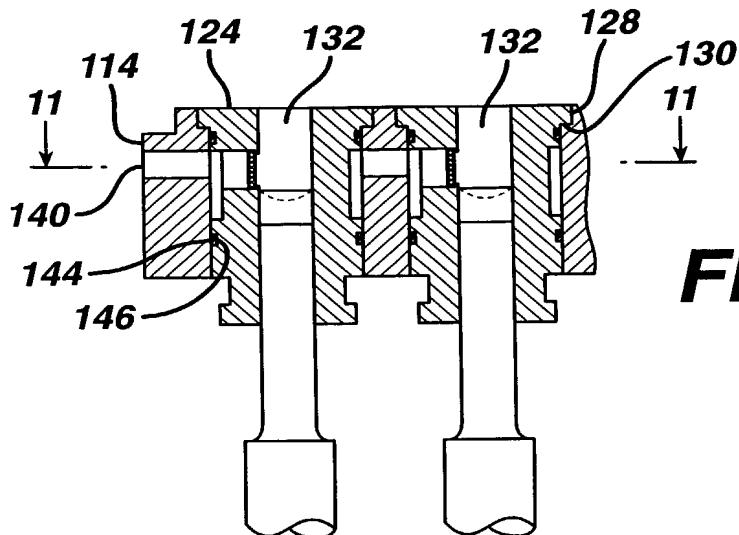


FIG. 8

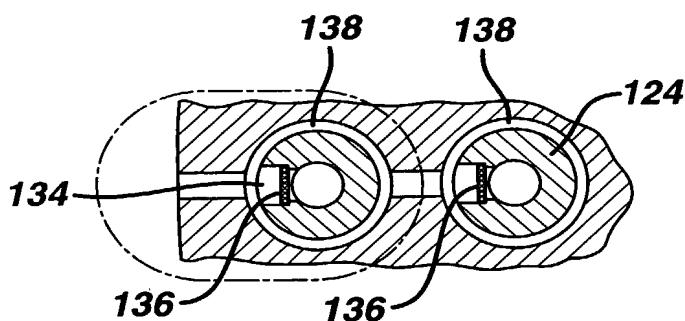
**FIG. 9**



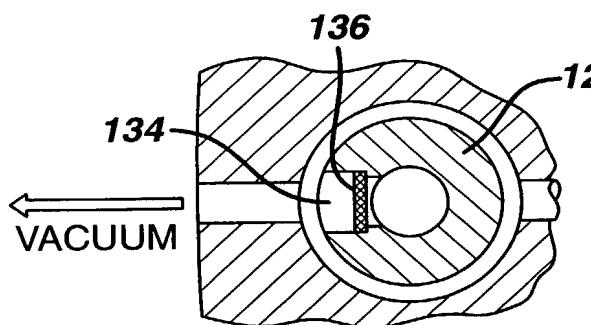
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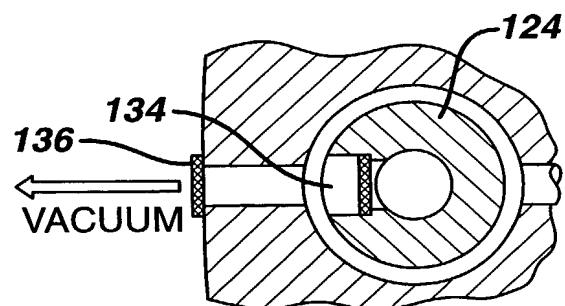
**FIG. 10**



**FIG. 11**



**FIG. 12**

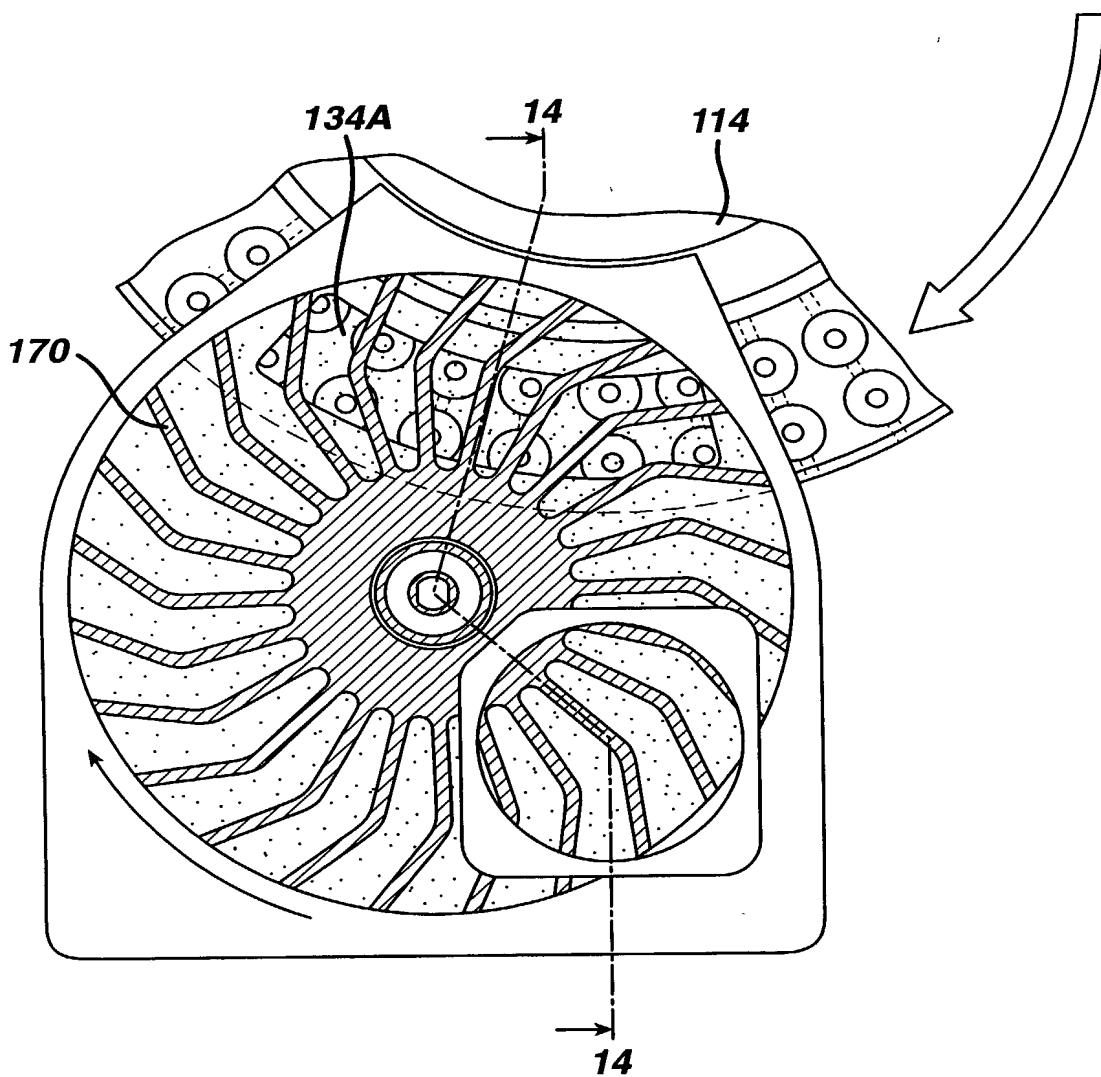


**FIG. 12A**

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

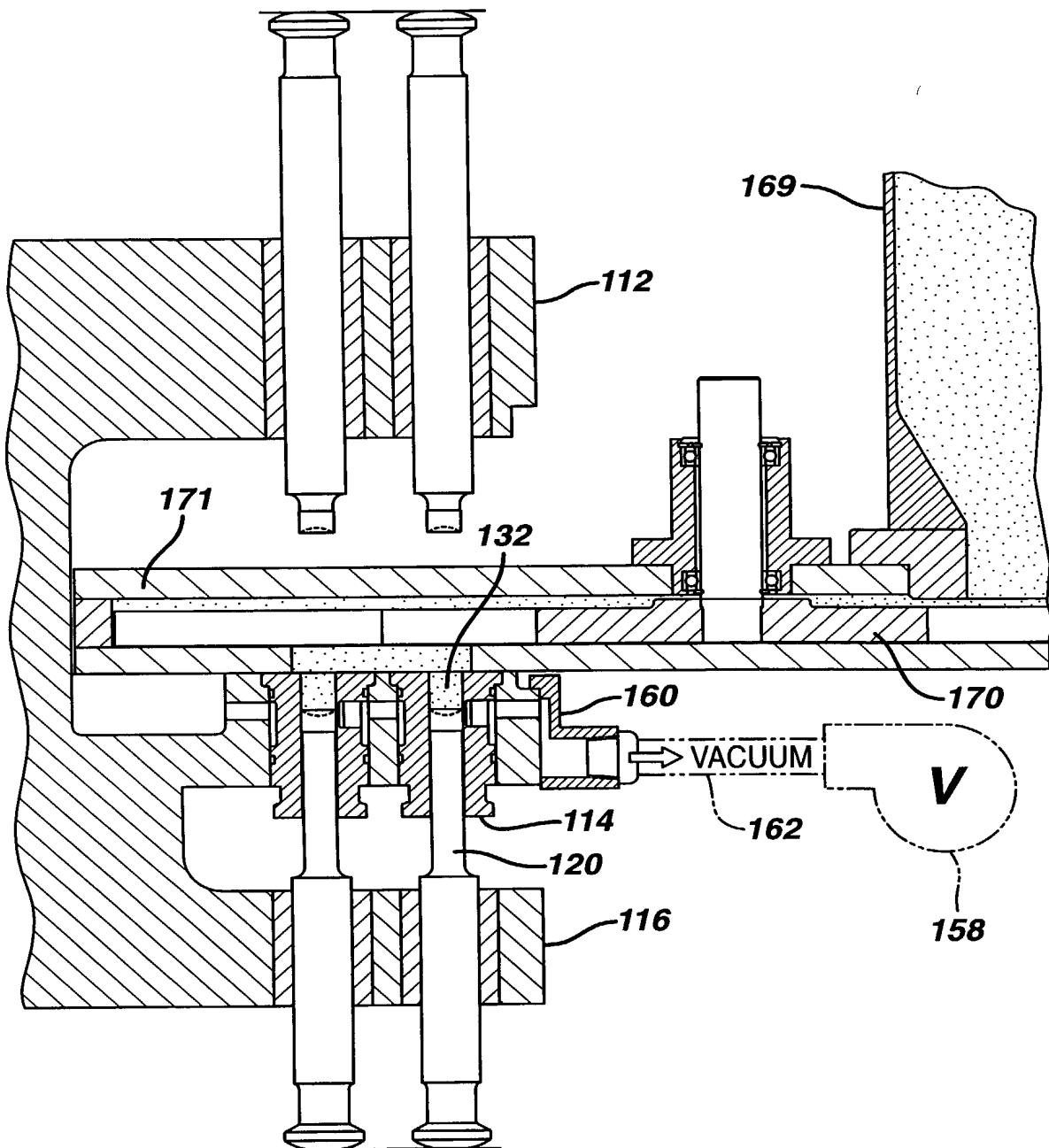
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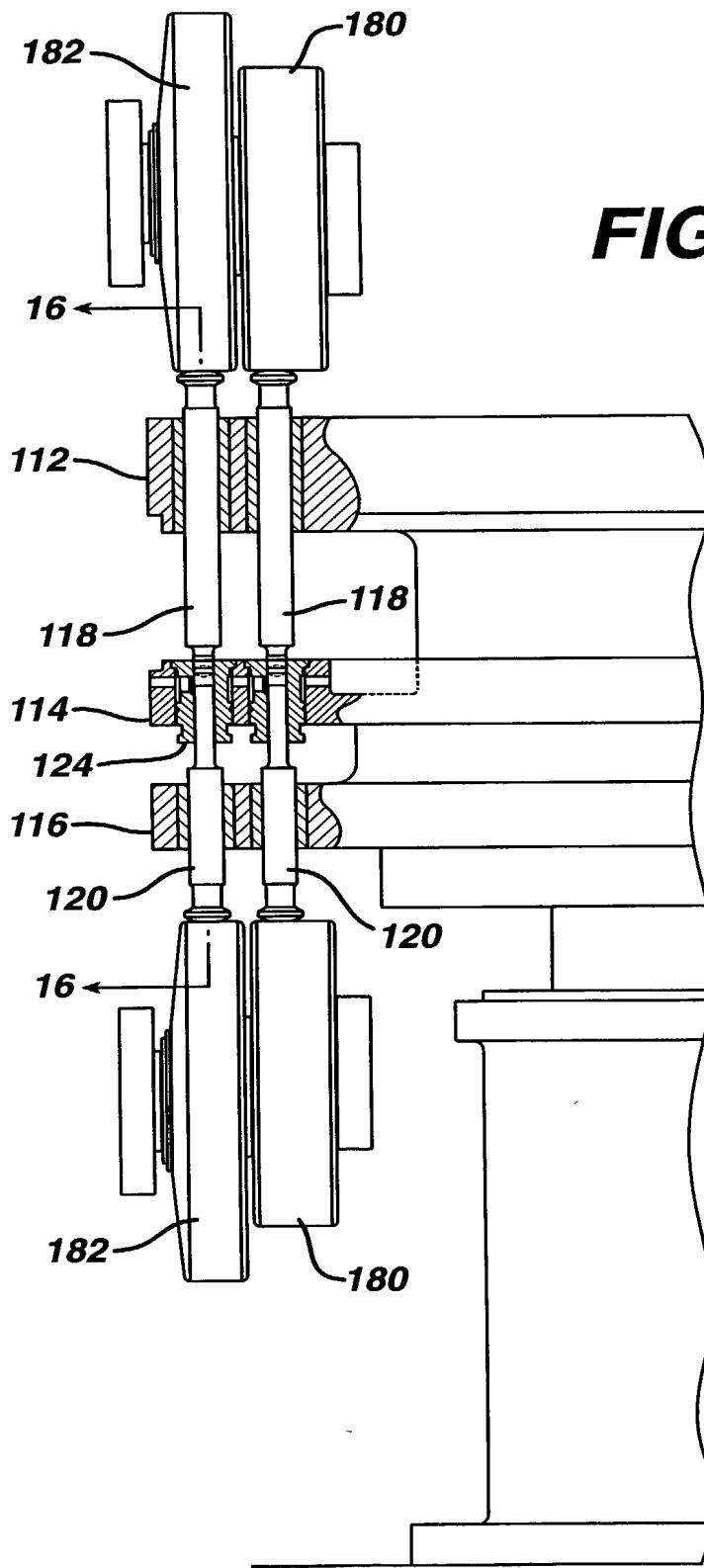
## FIG. 13



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**FIG. 14**



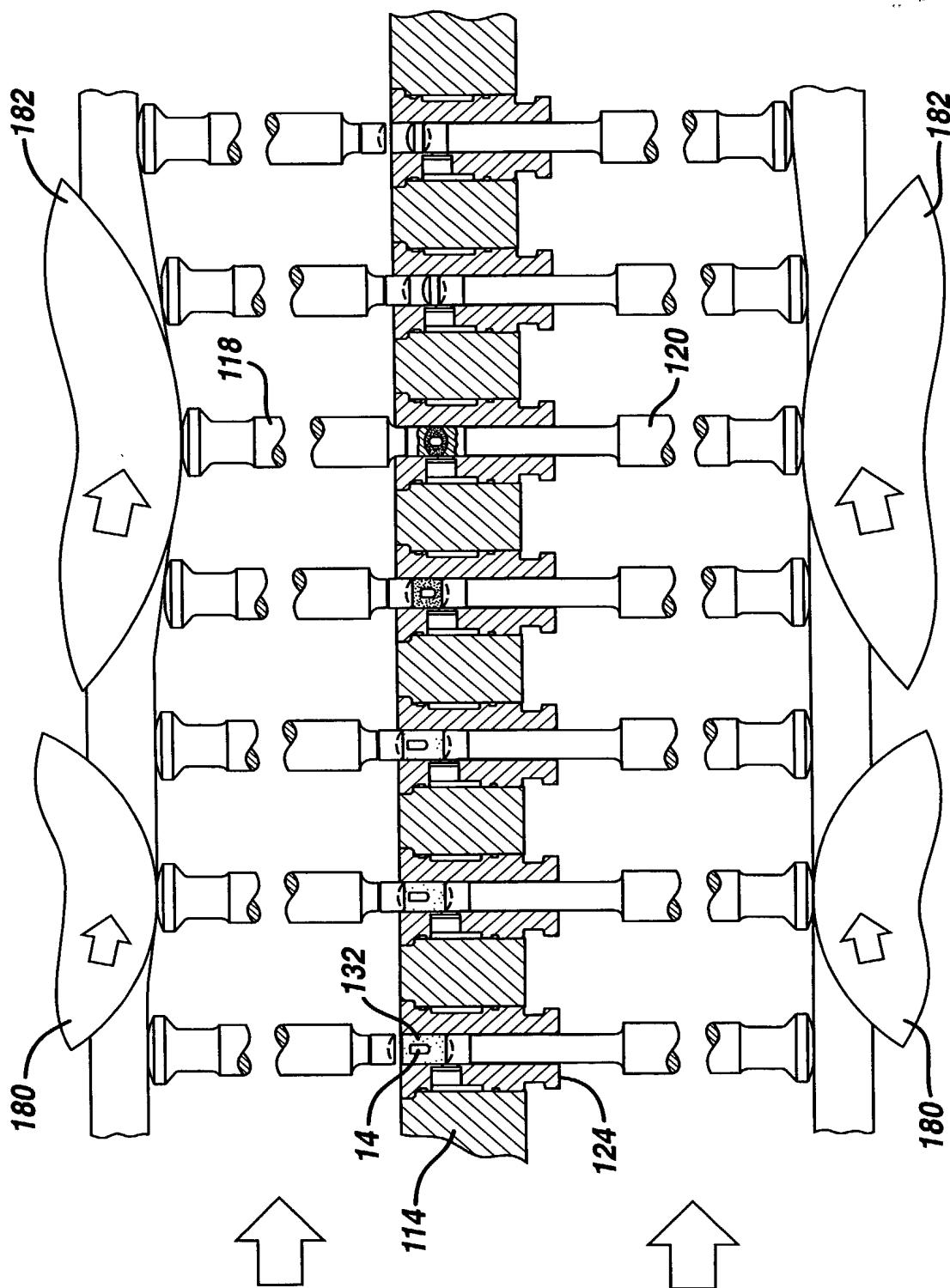


**FIG. 15**

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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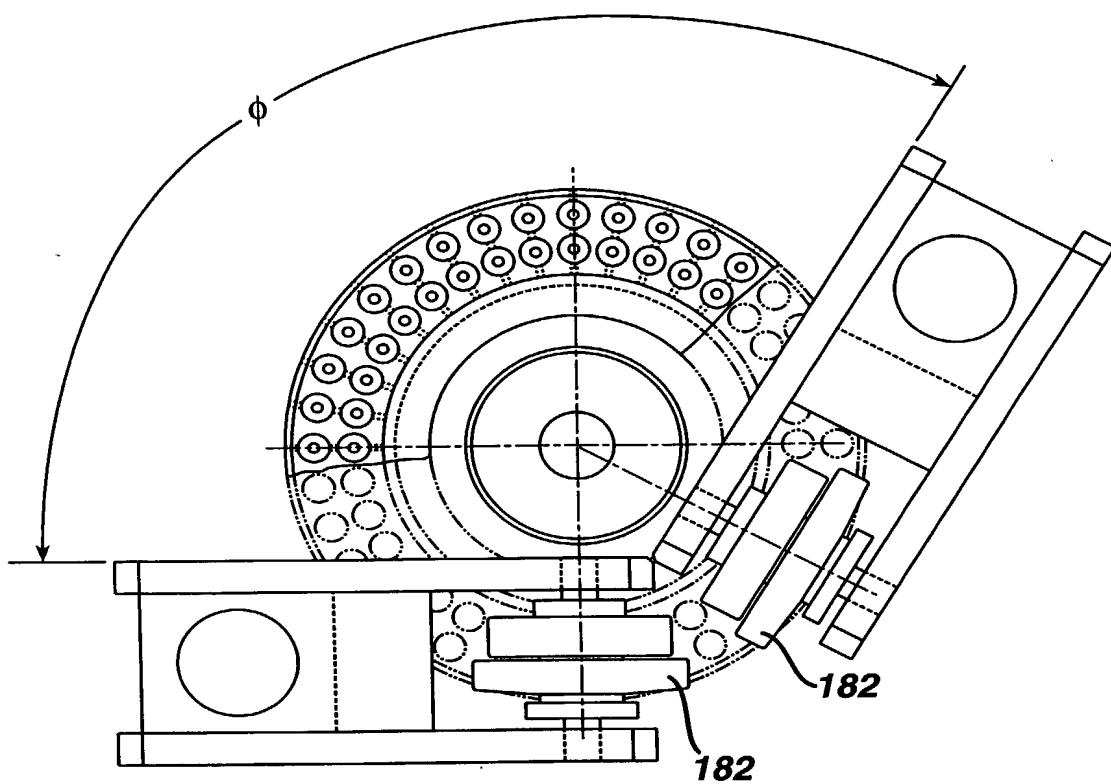
**FIG. 16**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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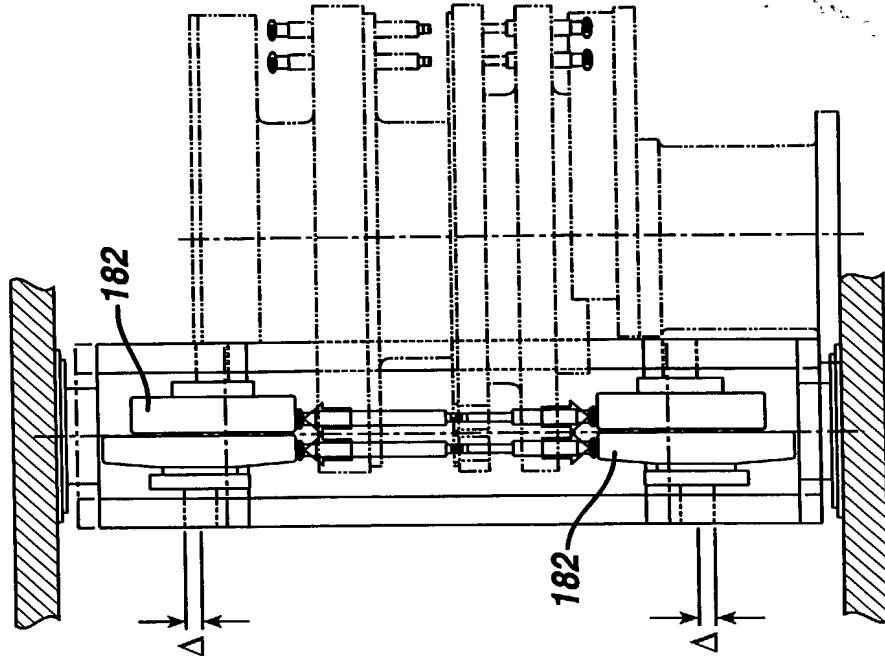
## FIG. 17A



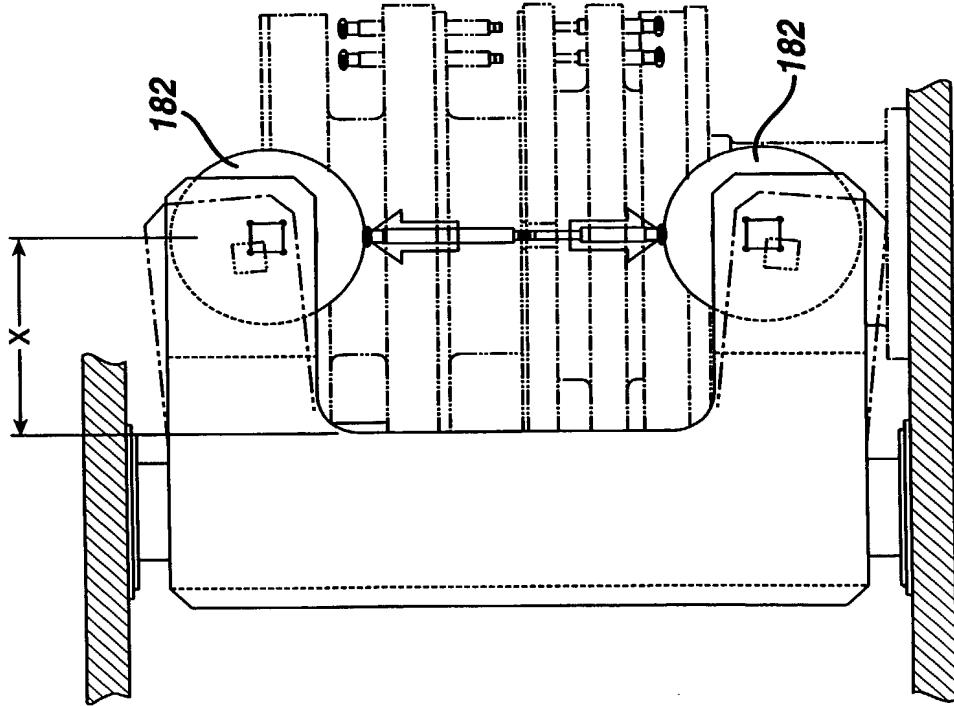
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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**FIG. 17C**



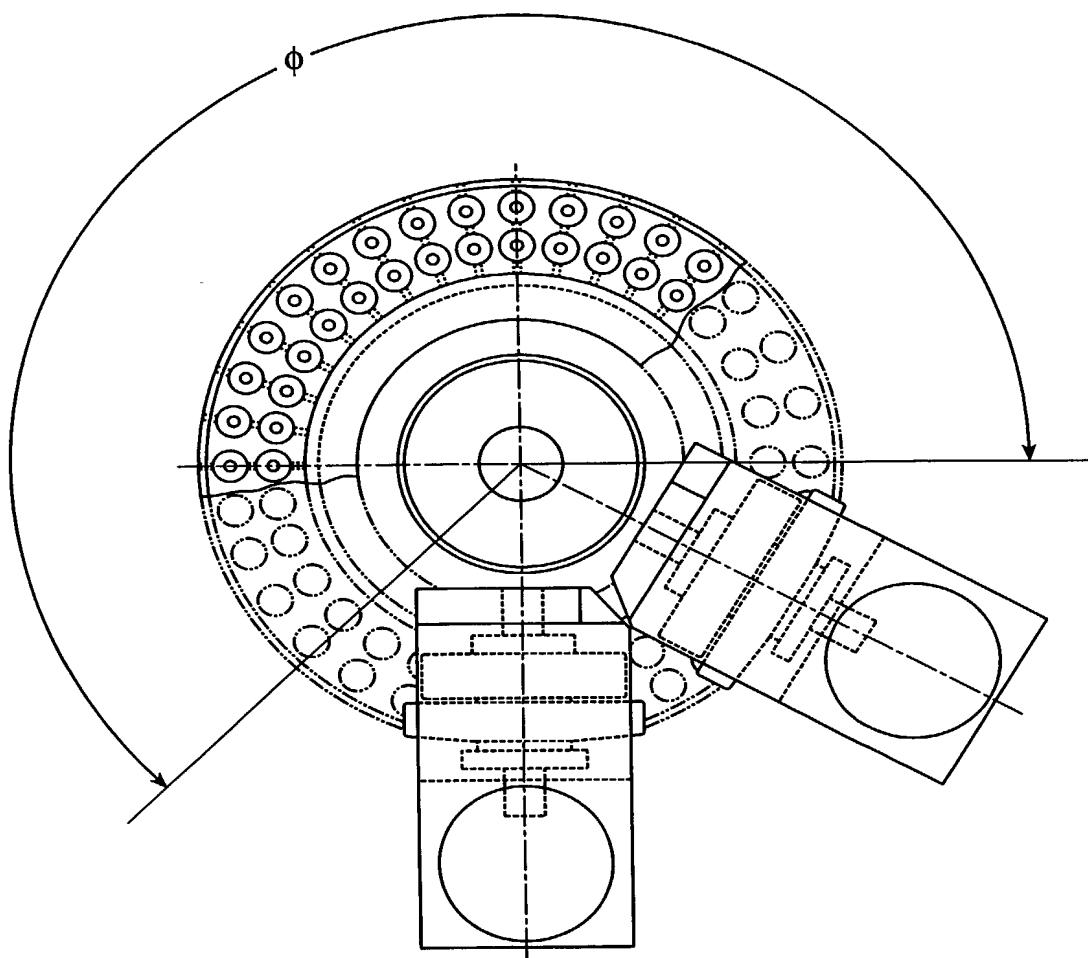
**FIG. 17B**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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## FIG. 18A



TITLE: Systems, Methods and Apparatuses for...

INVENTOR(S): Sowden, et al.

APP#: 09/966939

ATTY: S. E. Hayner

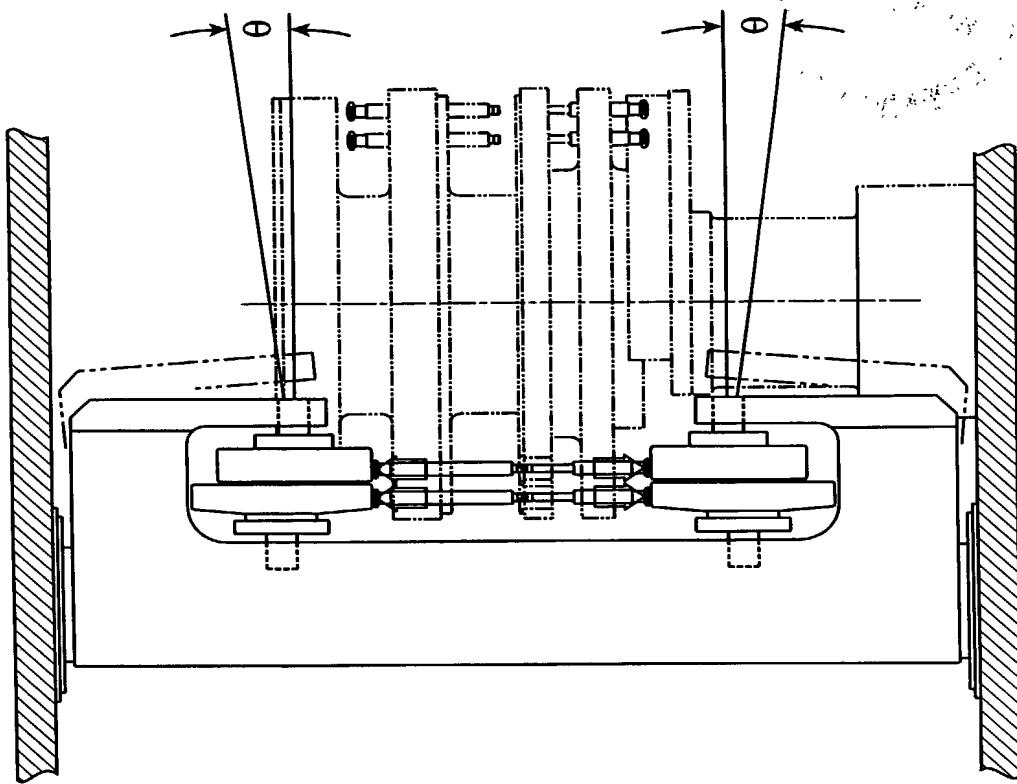
TEL. #: 732-524-2242

DOCKET #: MCP-0242

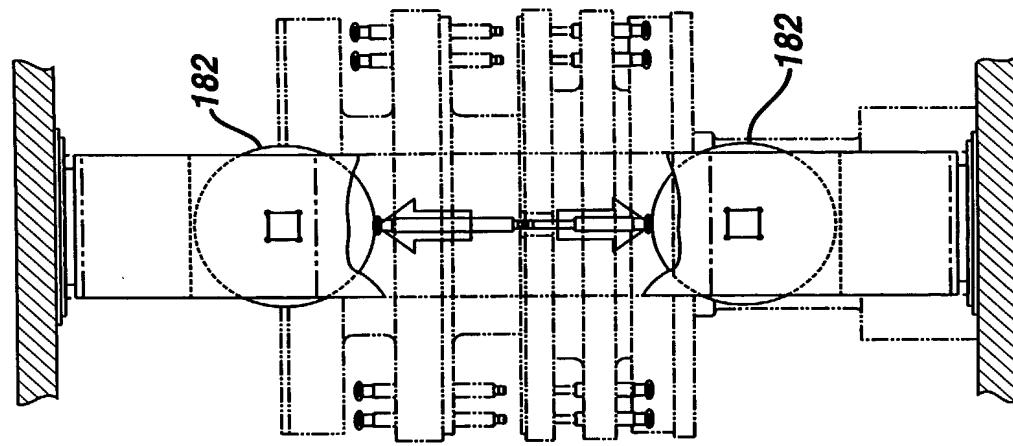
CUST. #: 000027777

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**FIG. 18C**



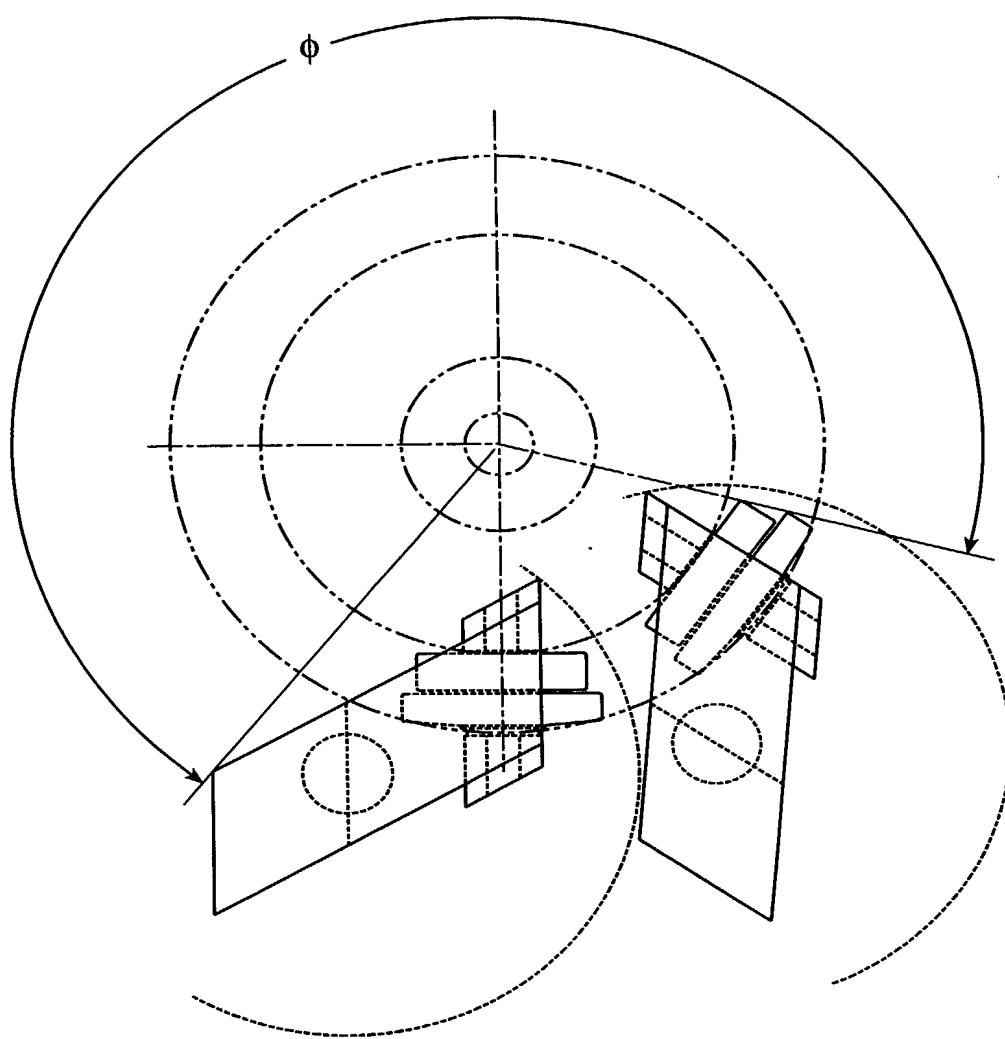
**FIG. 18B**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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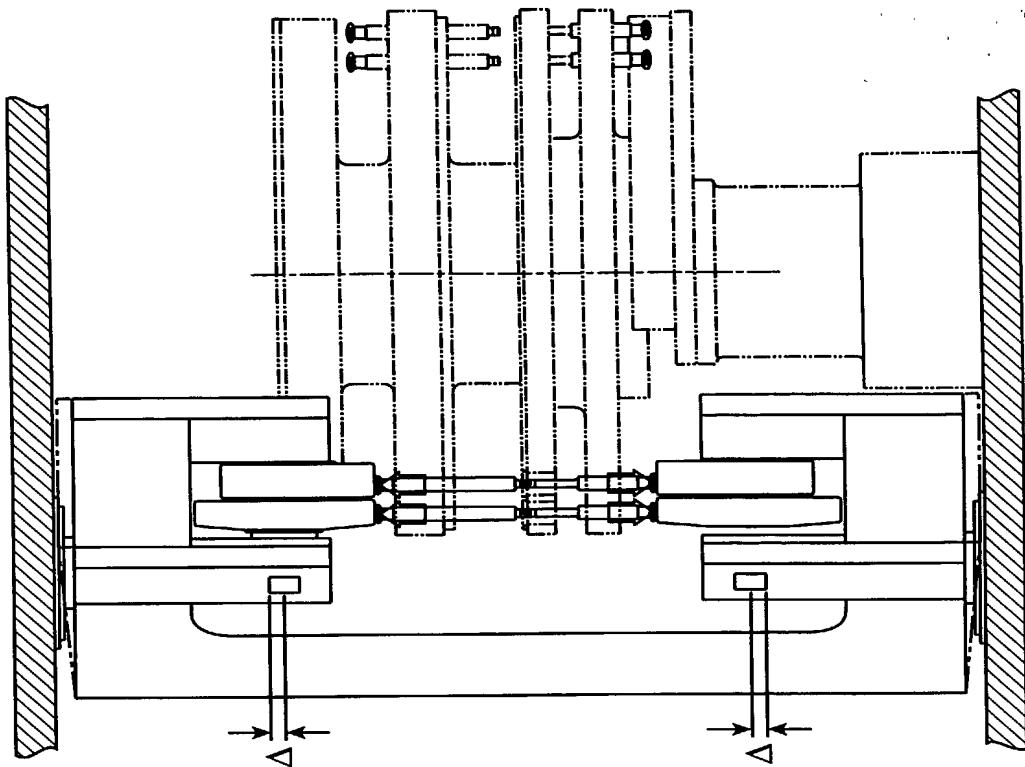
## FIG. 19A



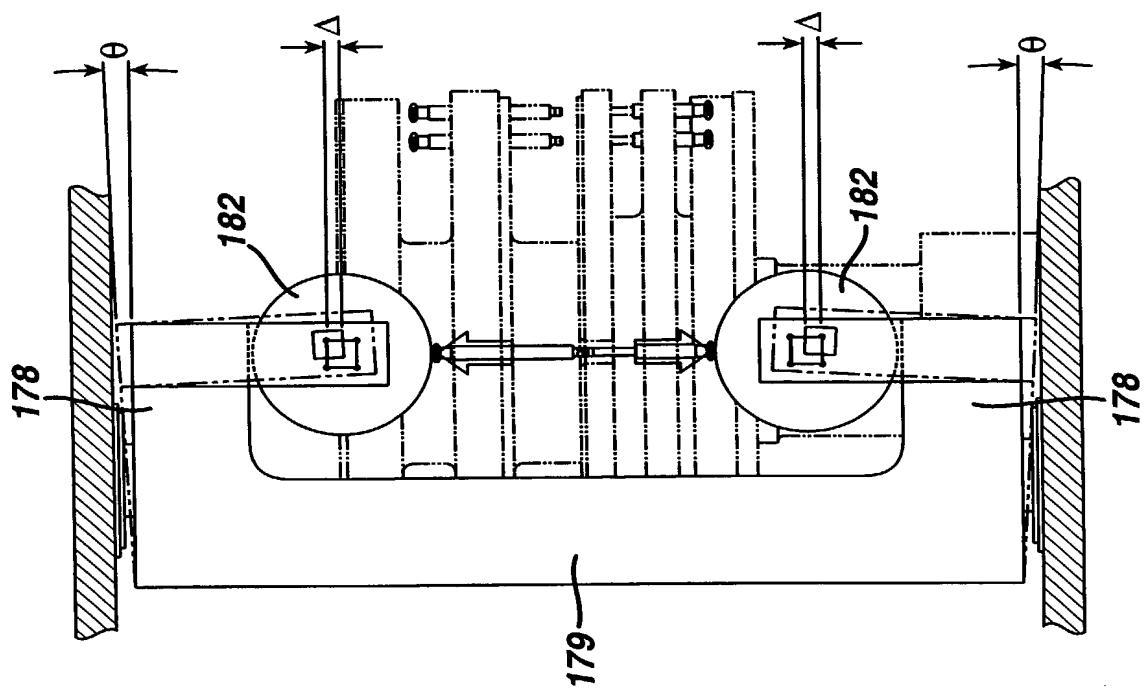
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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**FIG. 19C**



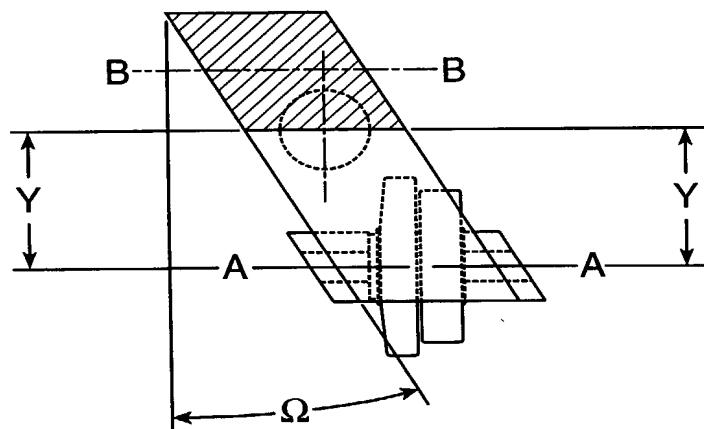
**FIG. 19B**



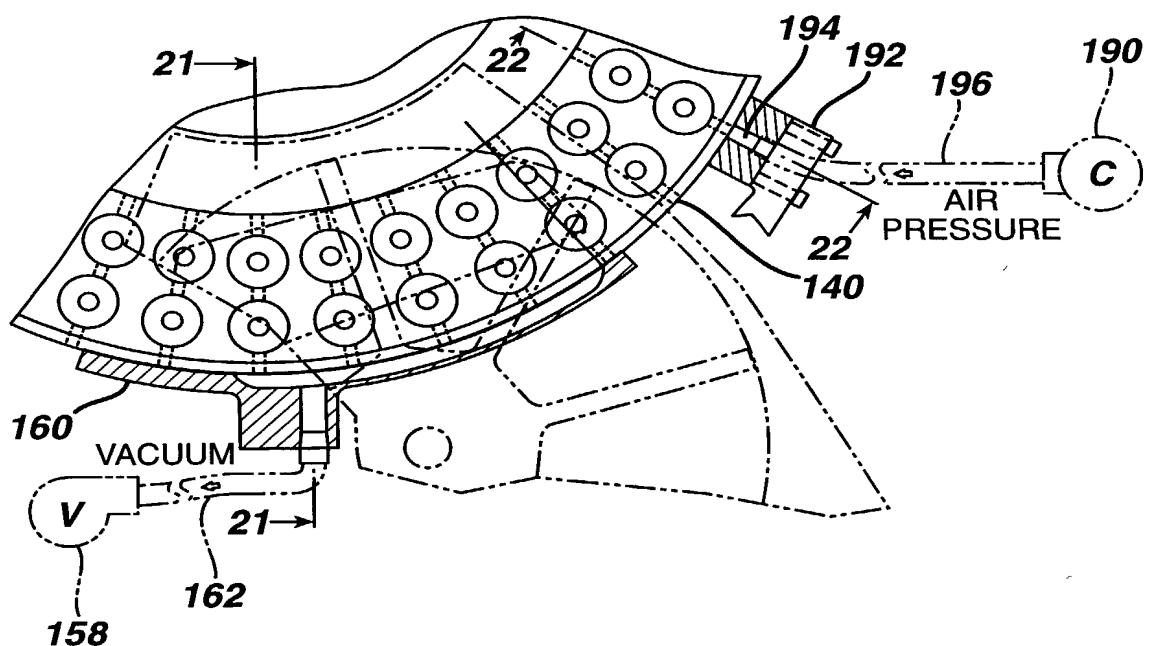
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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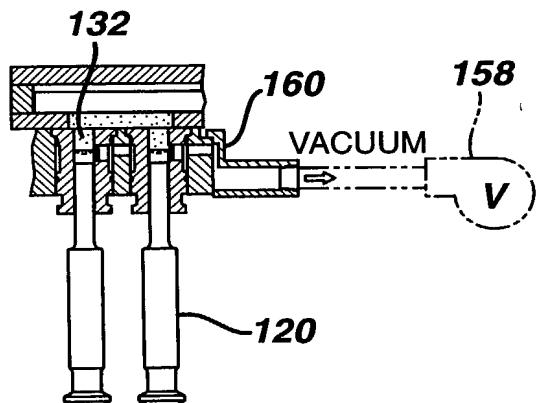
## FIG. 19D



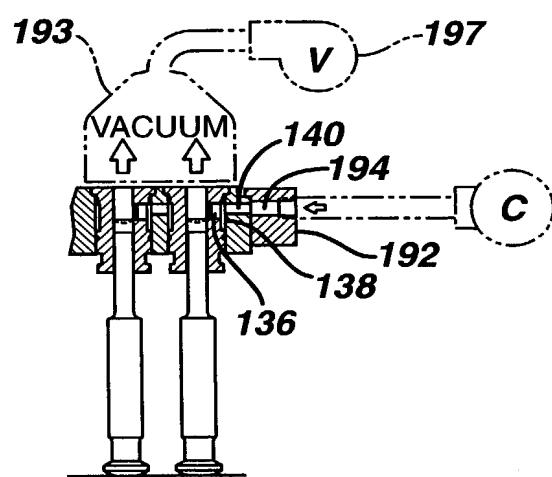
**FIG. 20**



**FIG. 21**



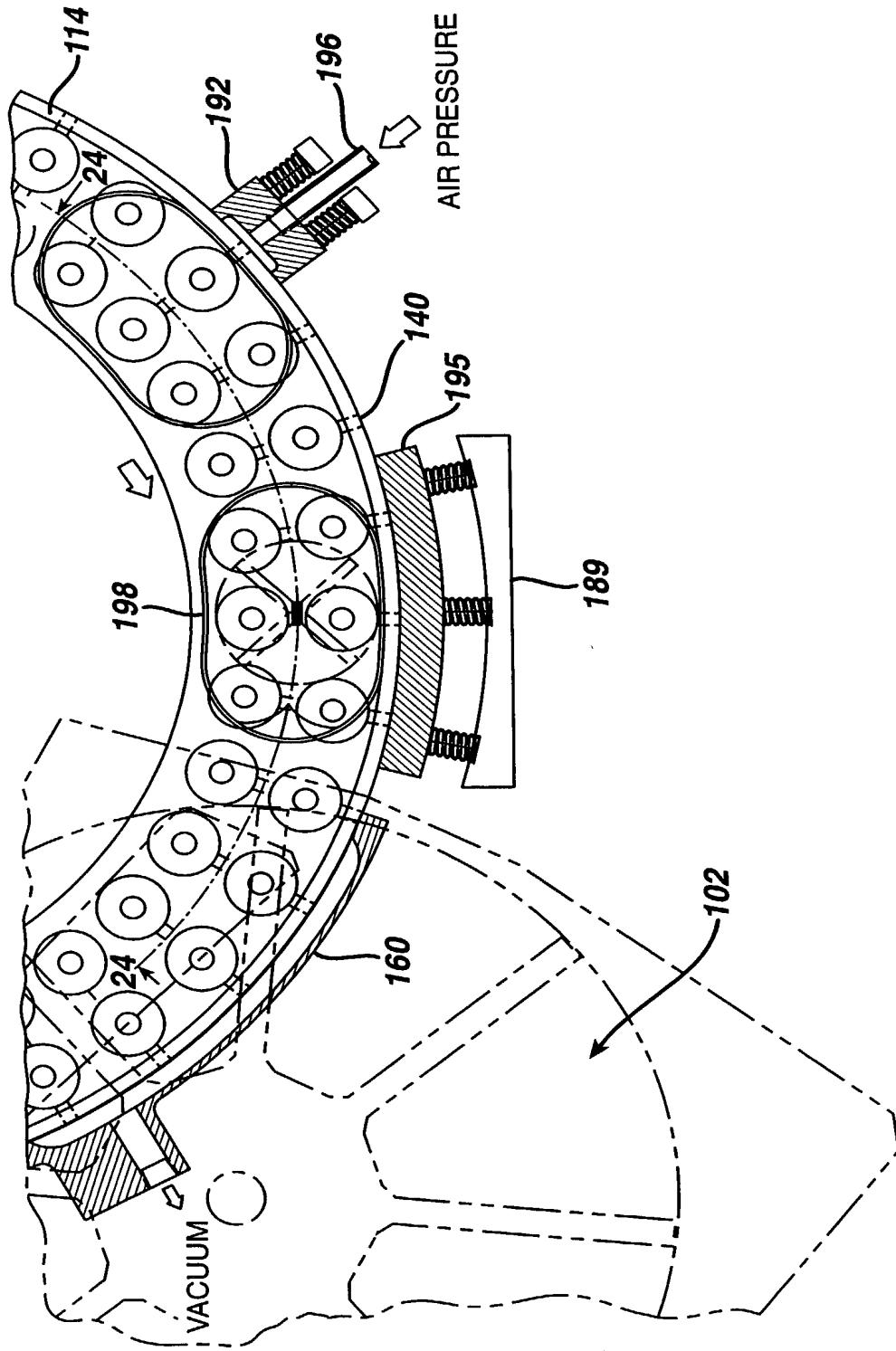
**FIG. 22**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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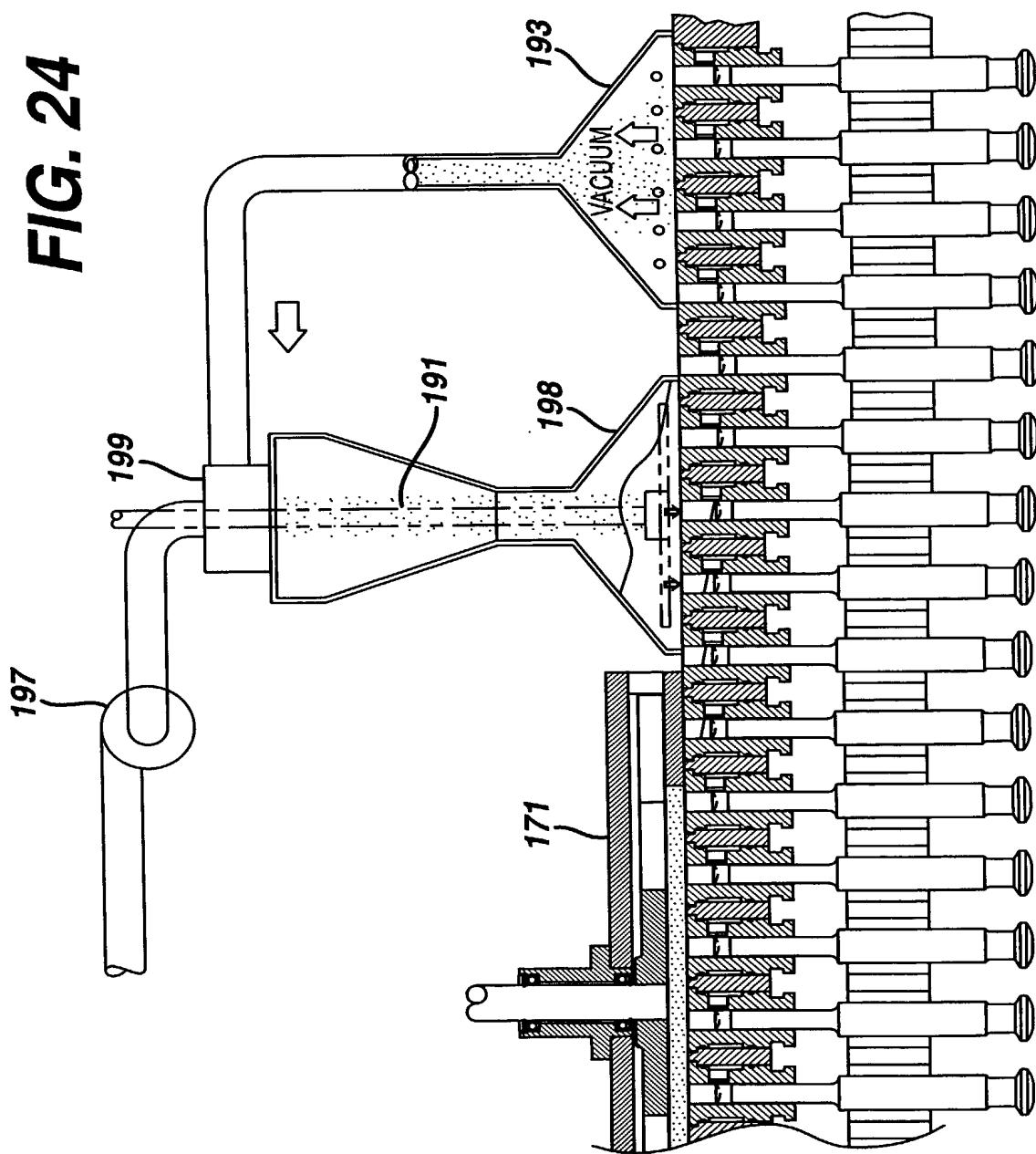
FIG. 23

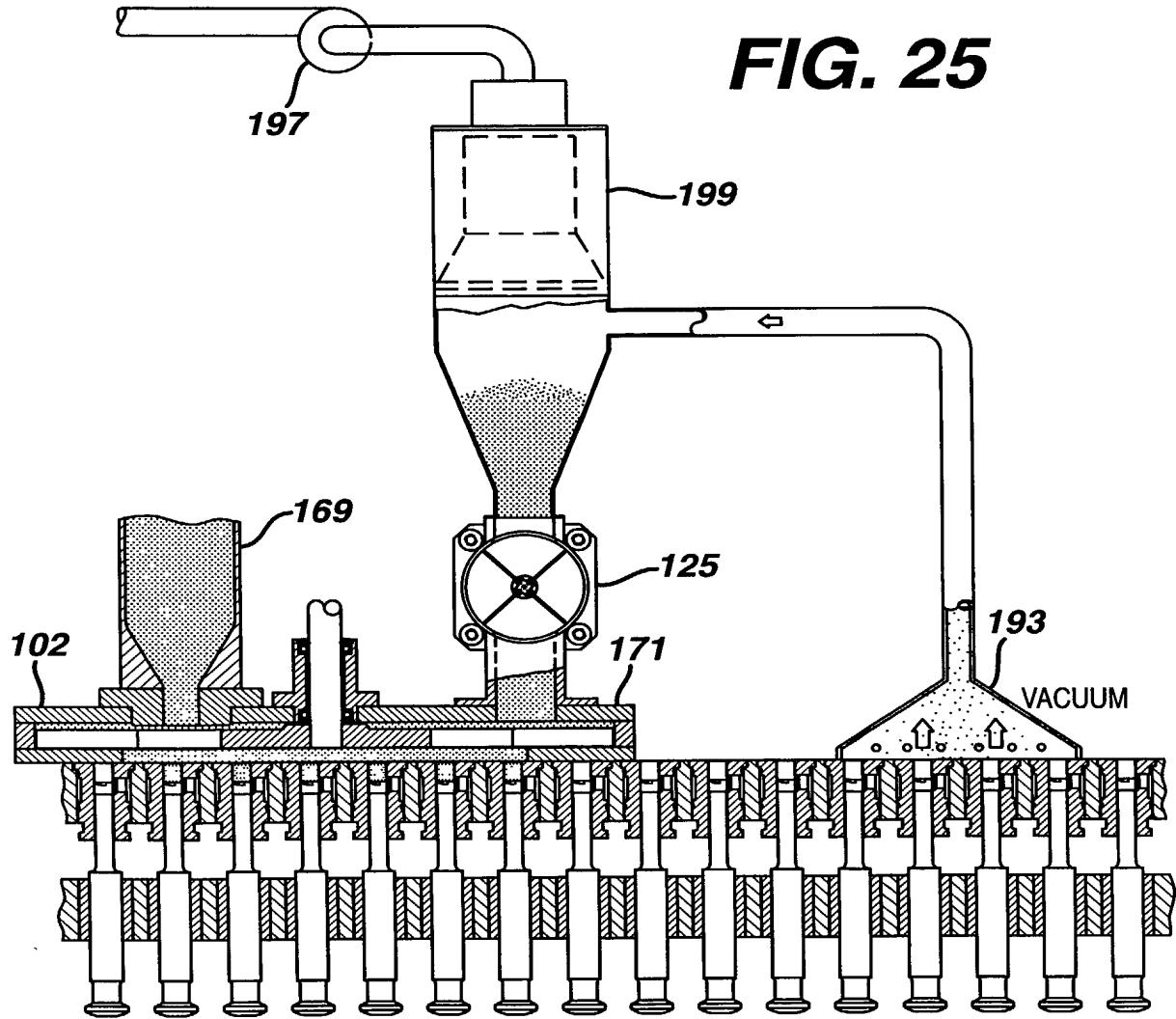


TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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FIG. 24

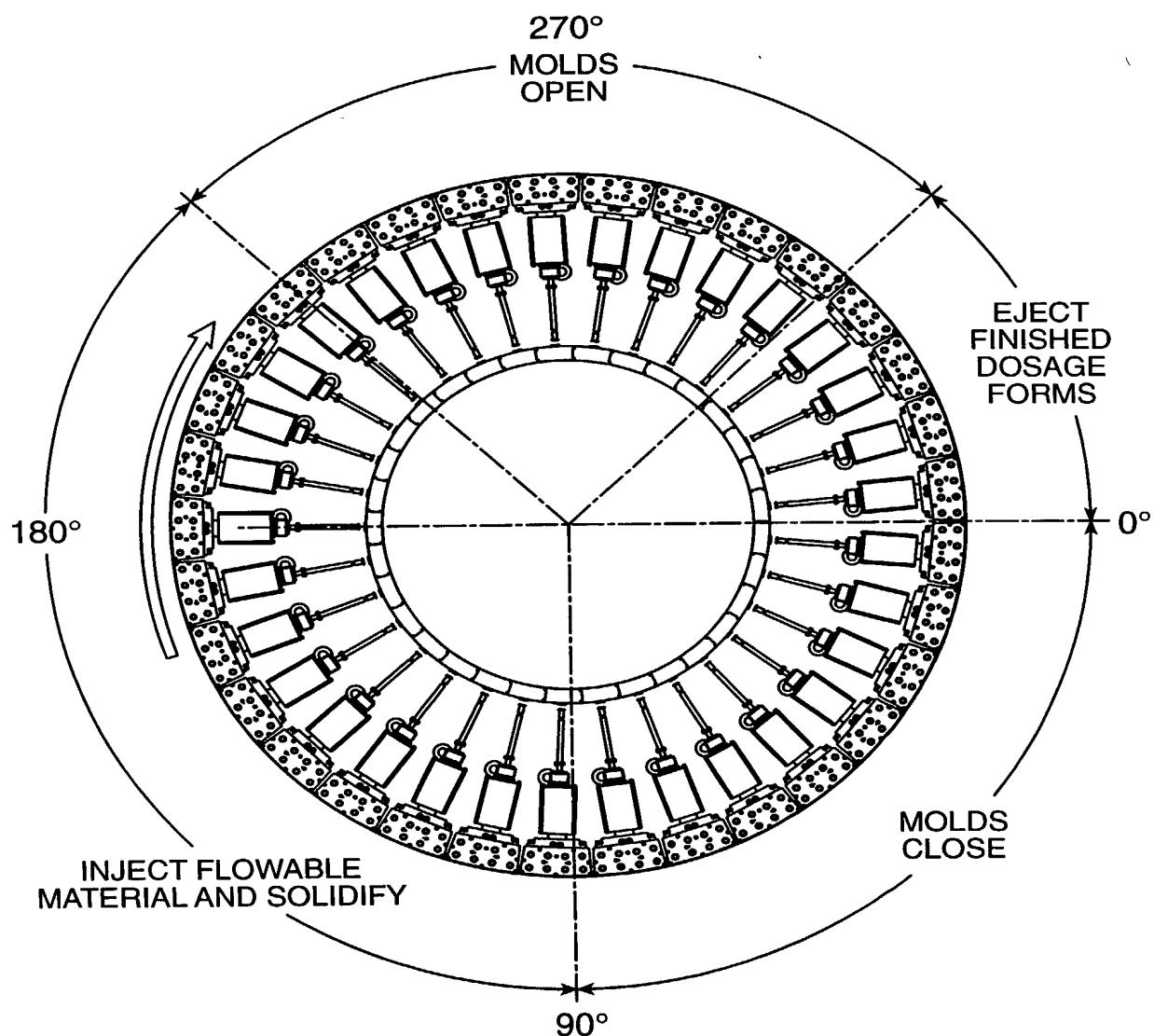




TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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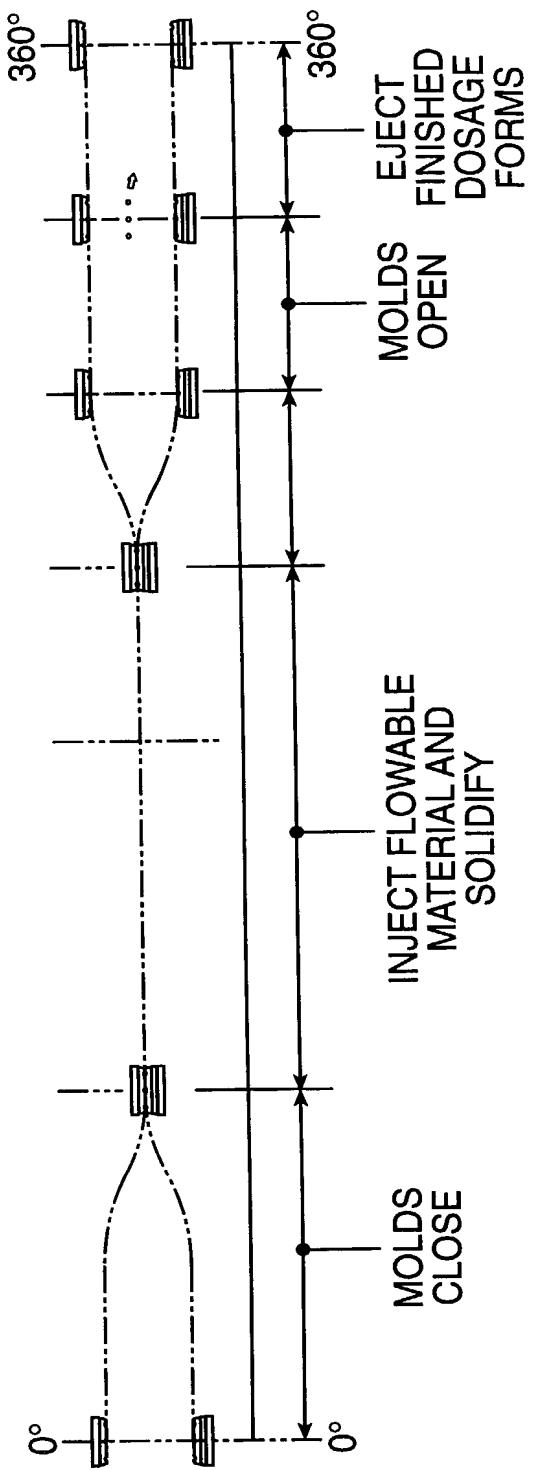
## FIG. 26A



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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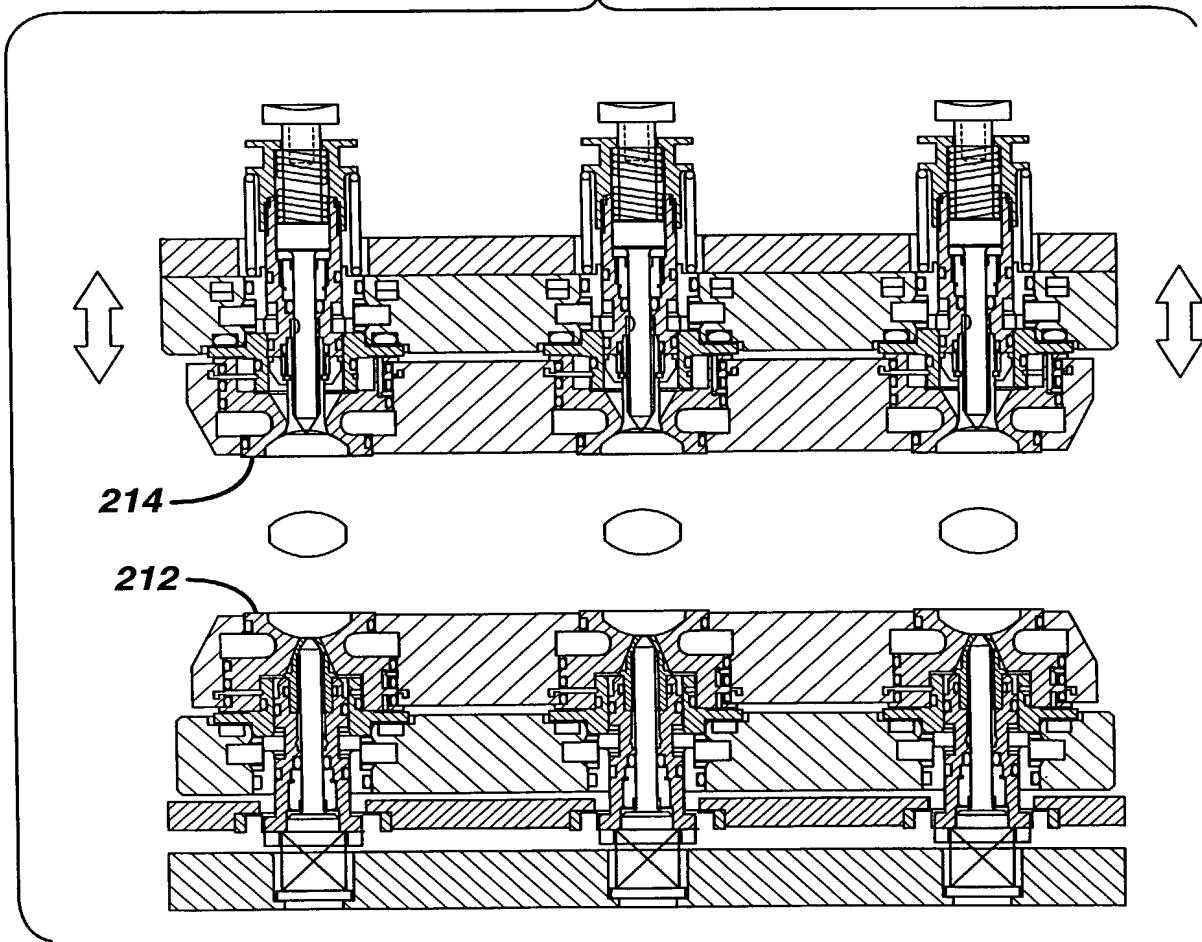
**FIG. 26B**



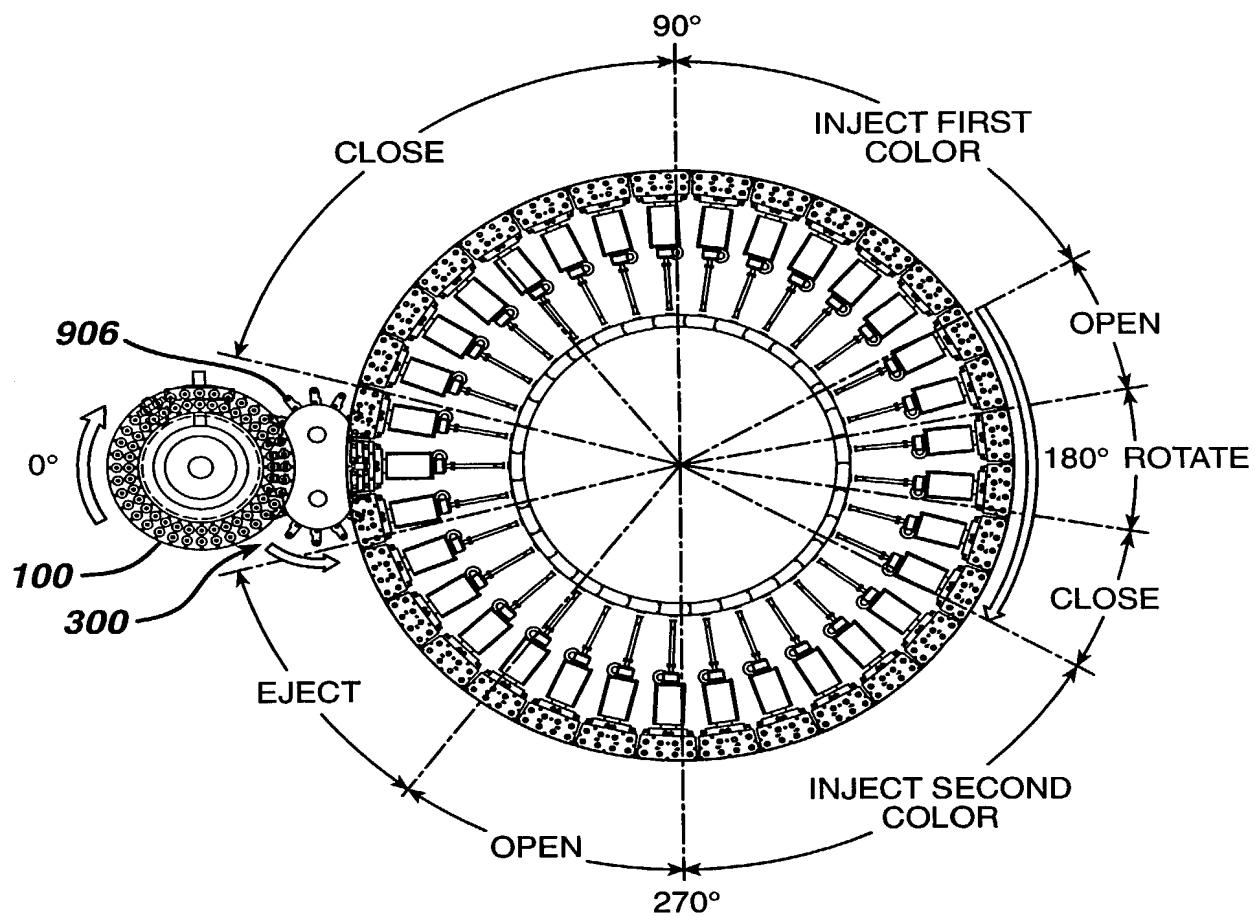
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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## FIG. 26C

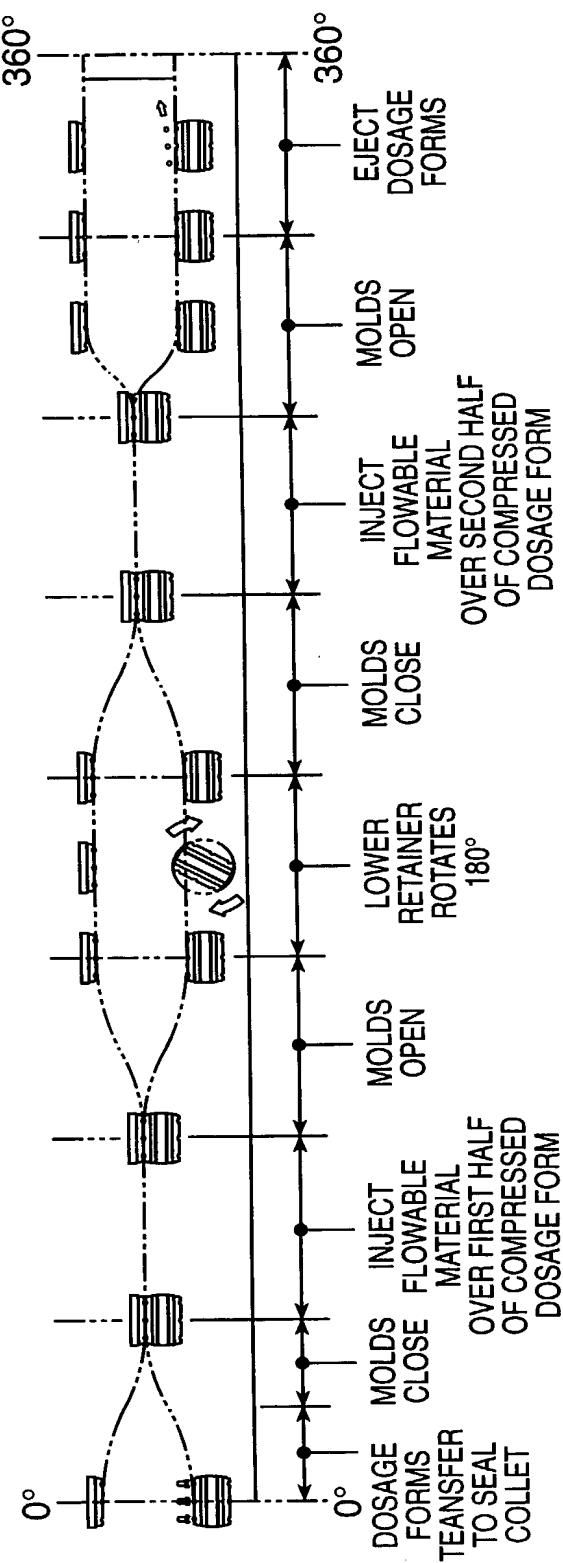


**FIG. 27A**



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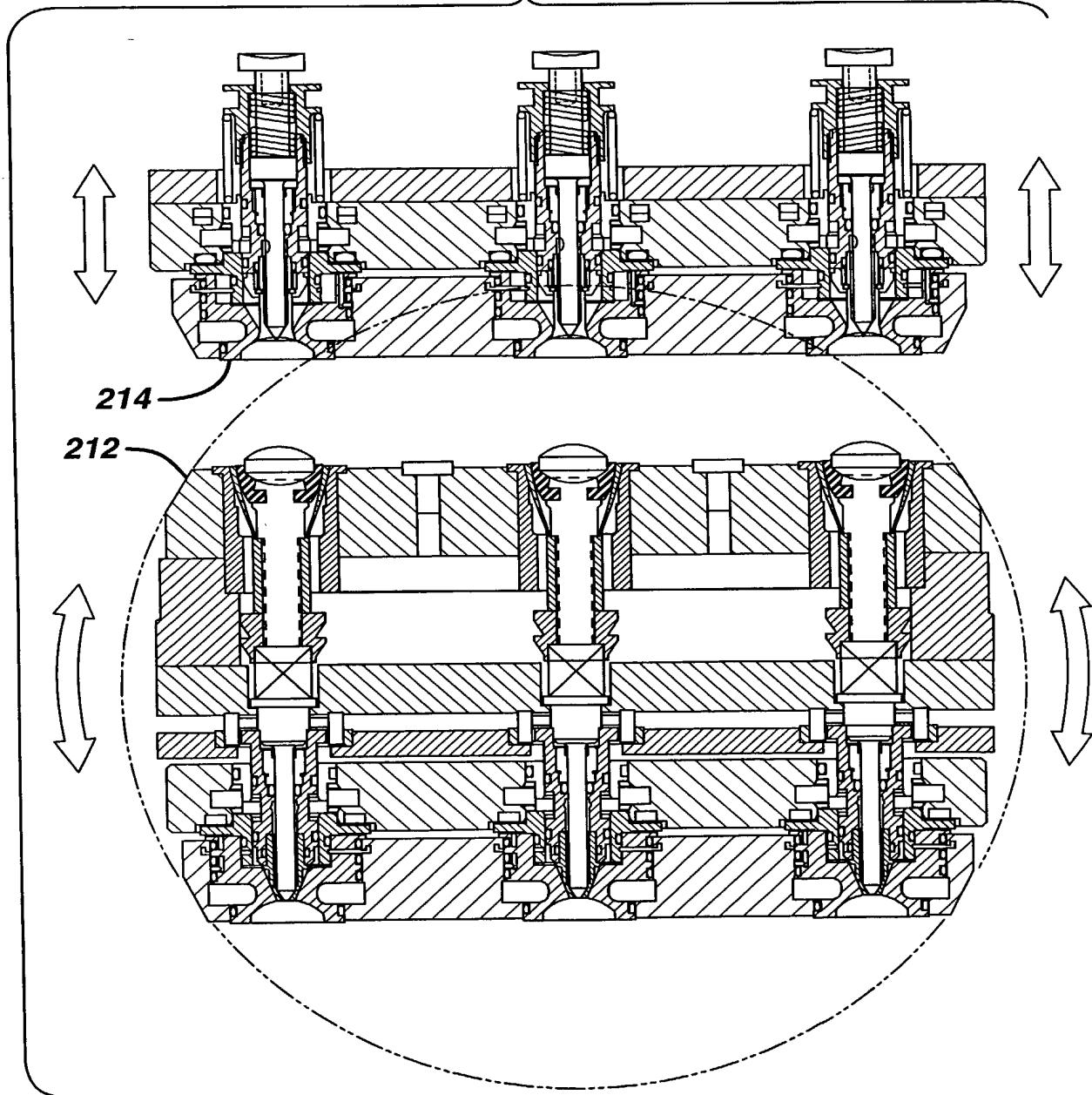
**FIG. 27B**



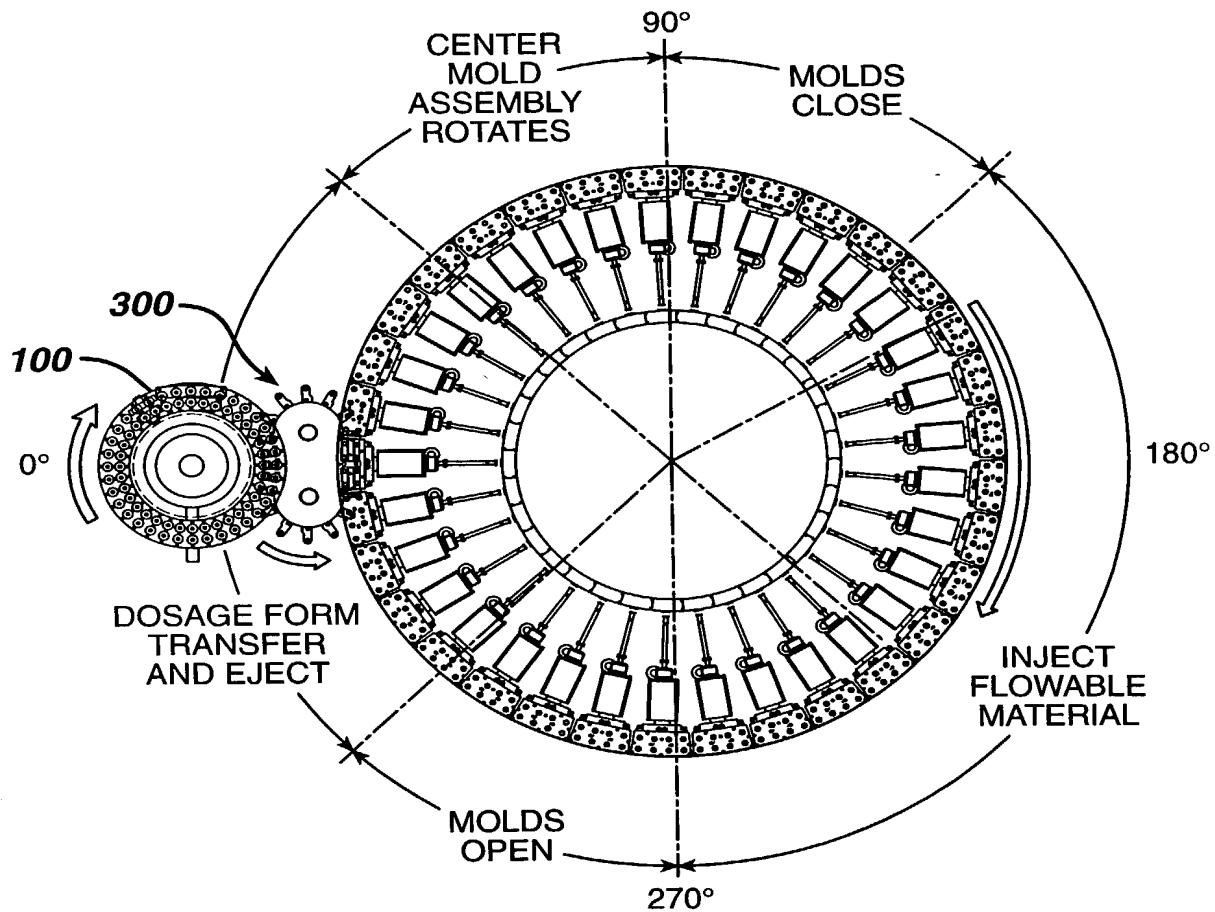
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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**FIG. 27C**



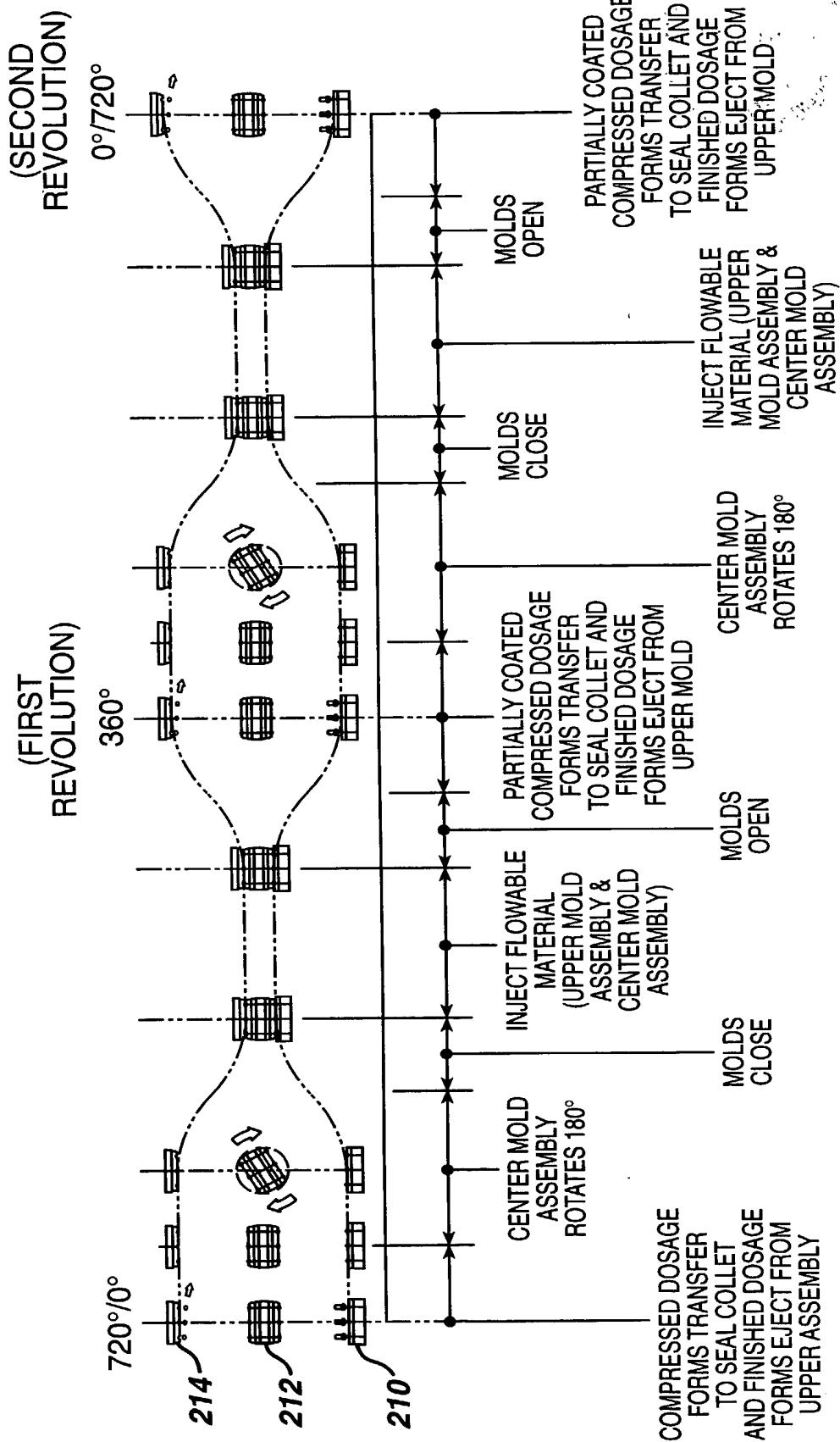
**FIG. 28A**



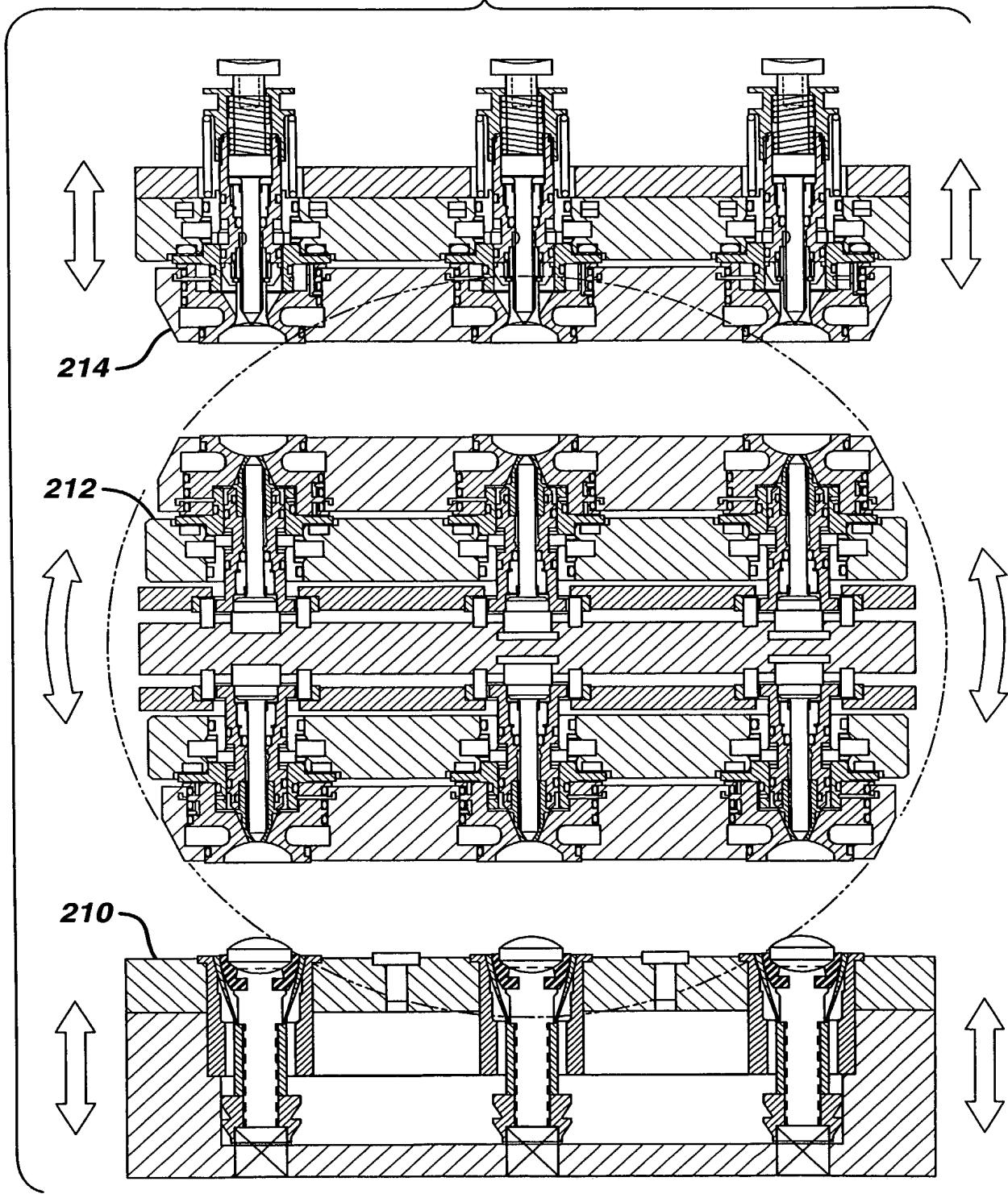
## FIG. 28B

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#; 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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**FIG. 28C**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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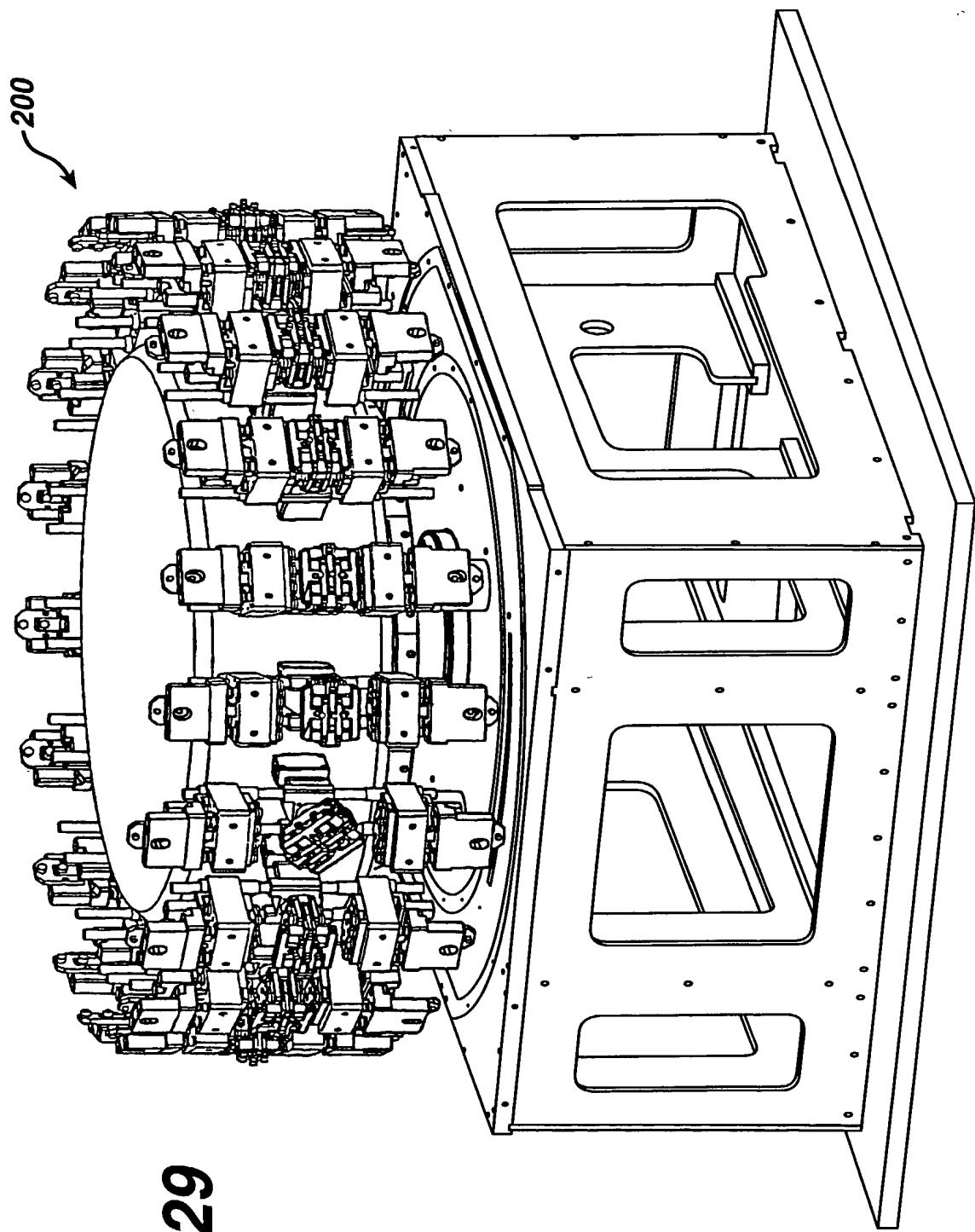
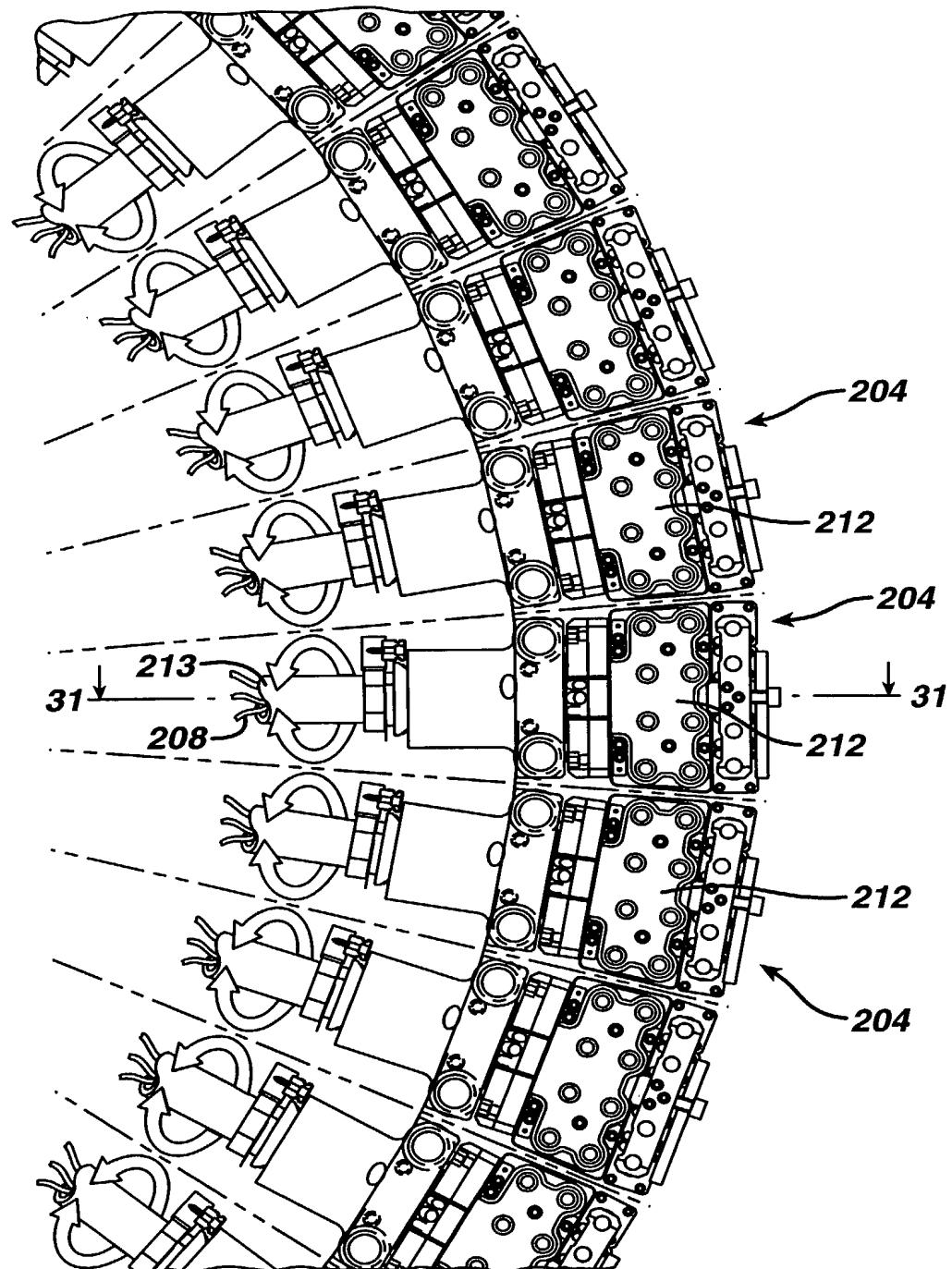


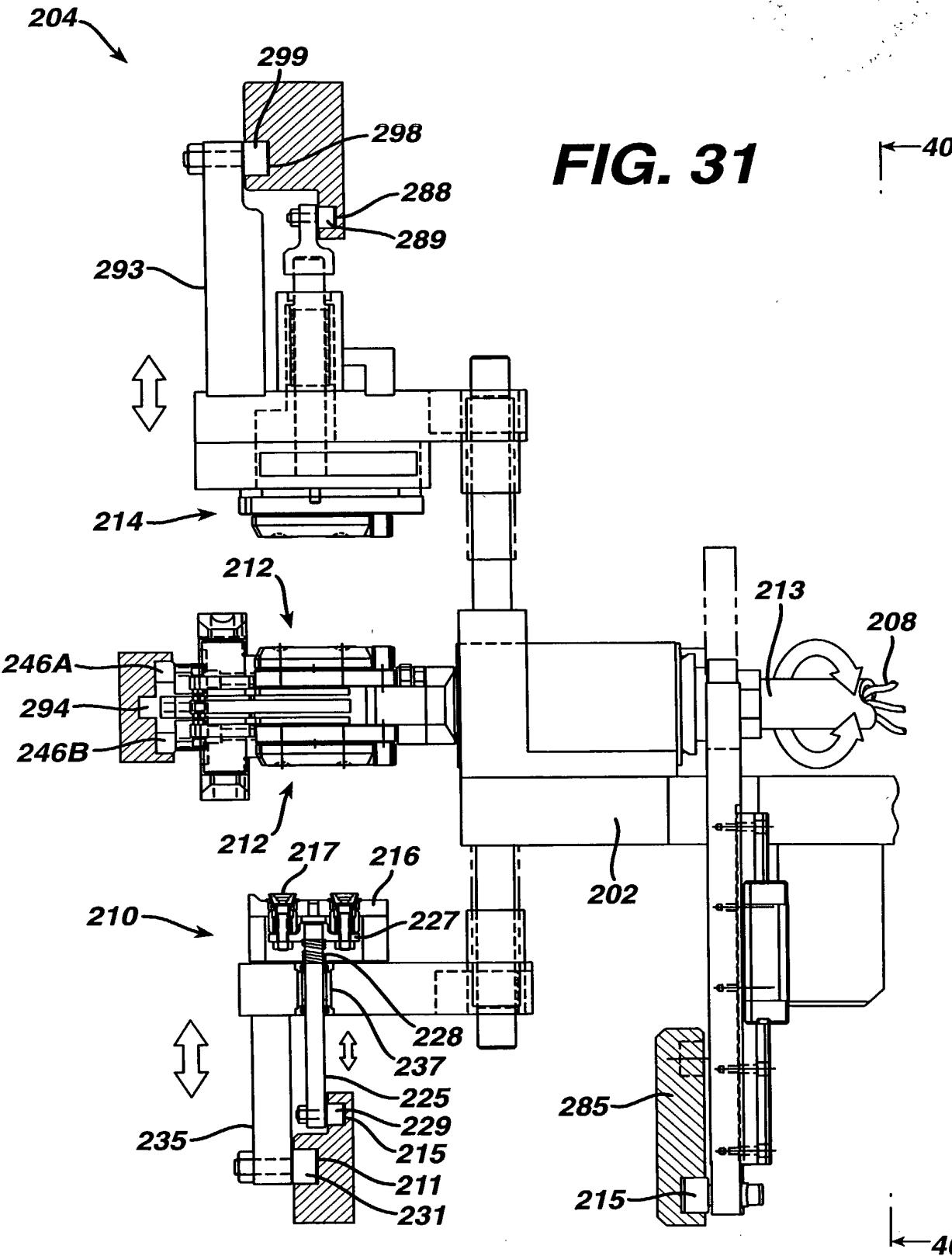
FIG. 29

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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## FIG. 30

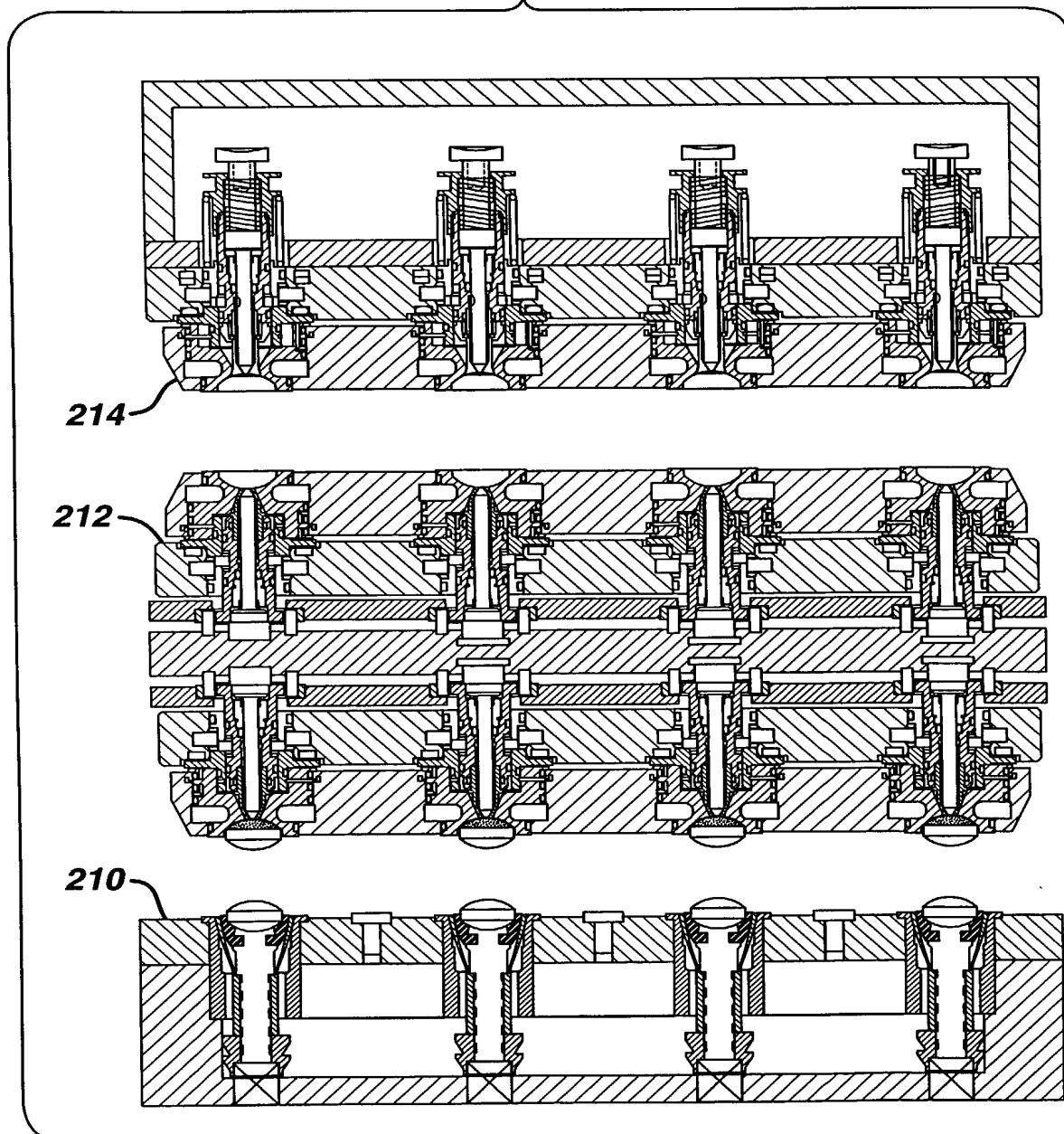




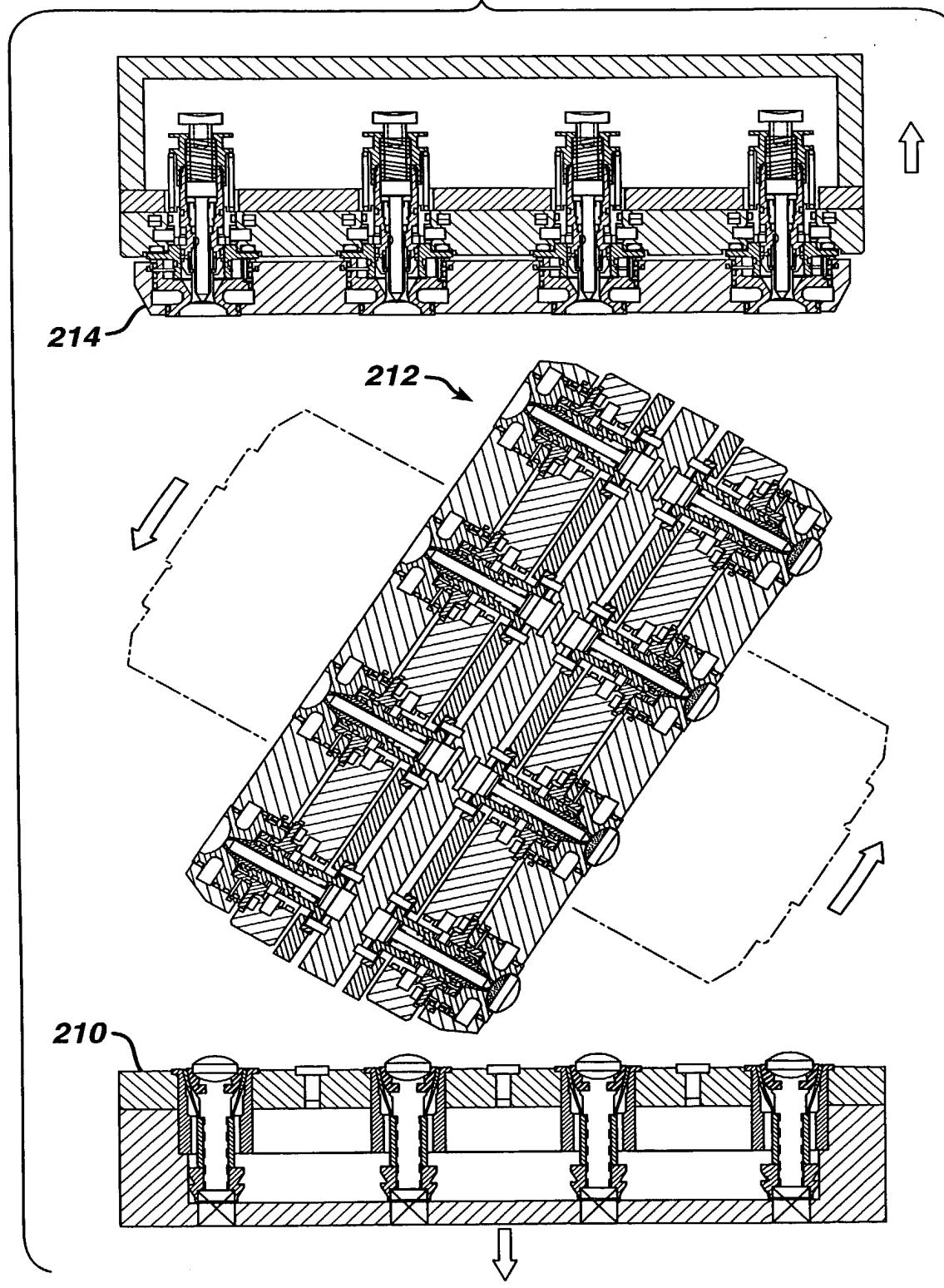
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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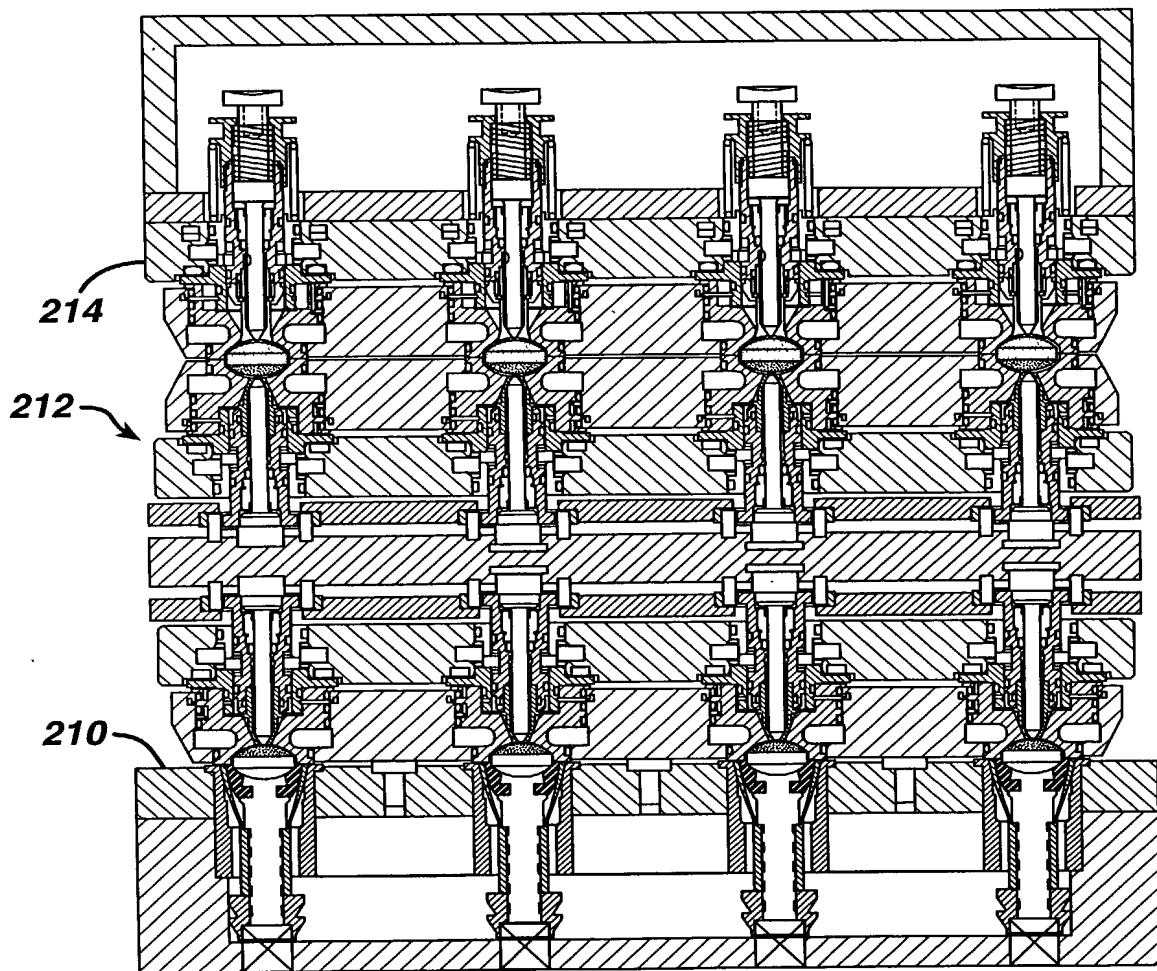
## FIG. 32



**FIG. 33**



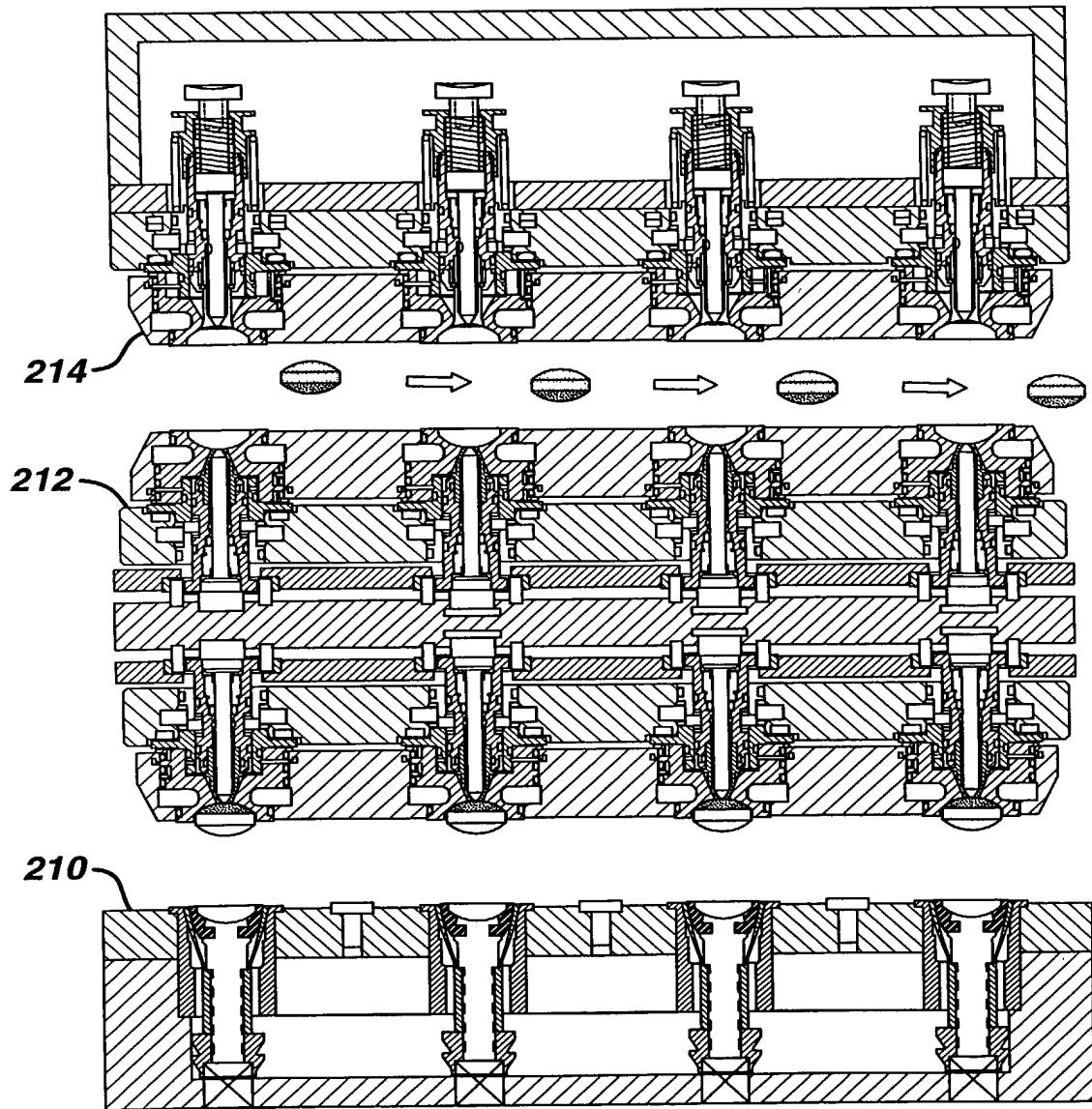
**FIG. 34**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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## FIG. 35



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FIG. 39A

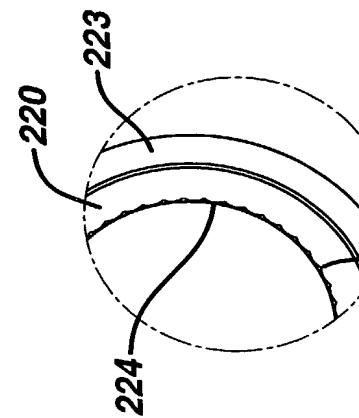


FIG. 39A

FIG. 39

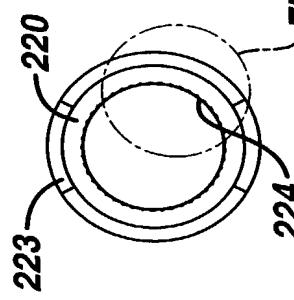


FIG. 38

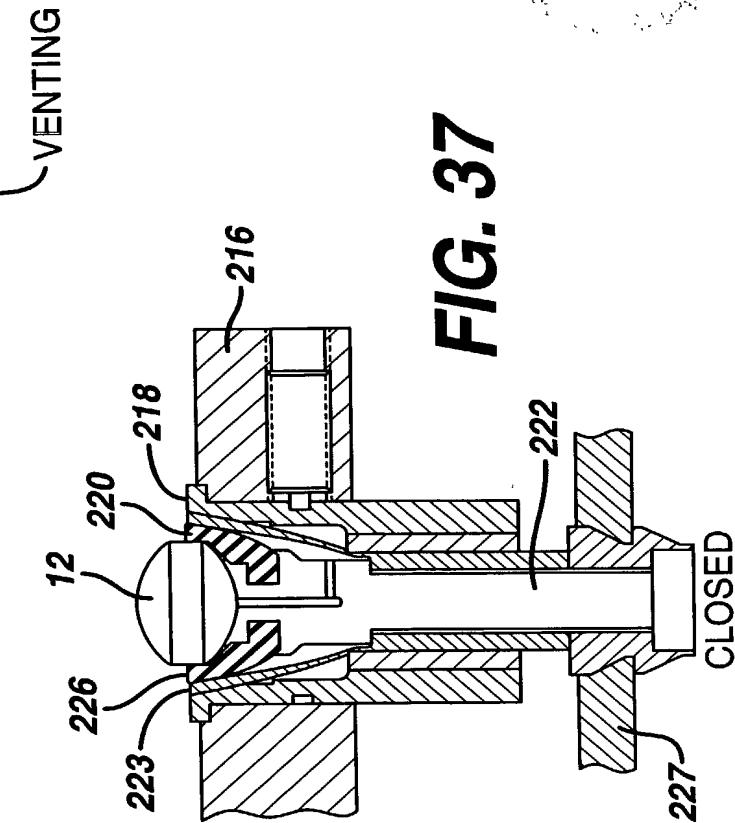
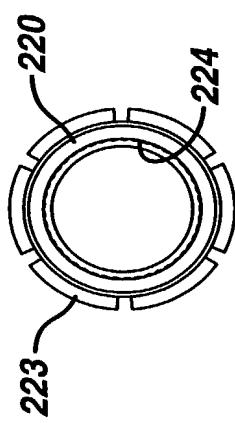


FIG. 37

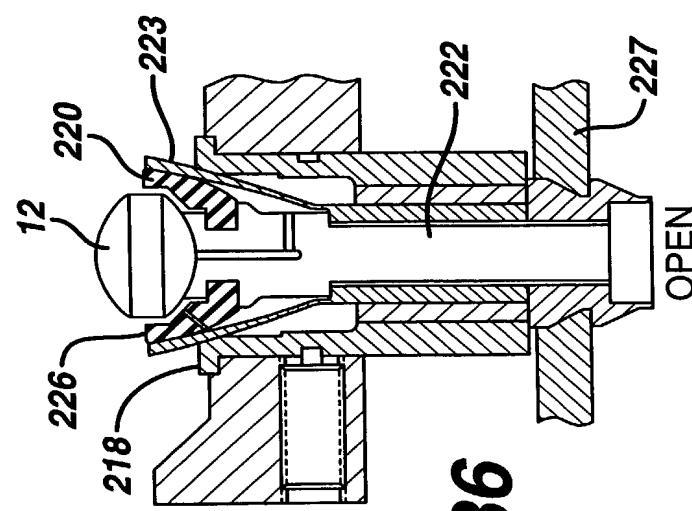
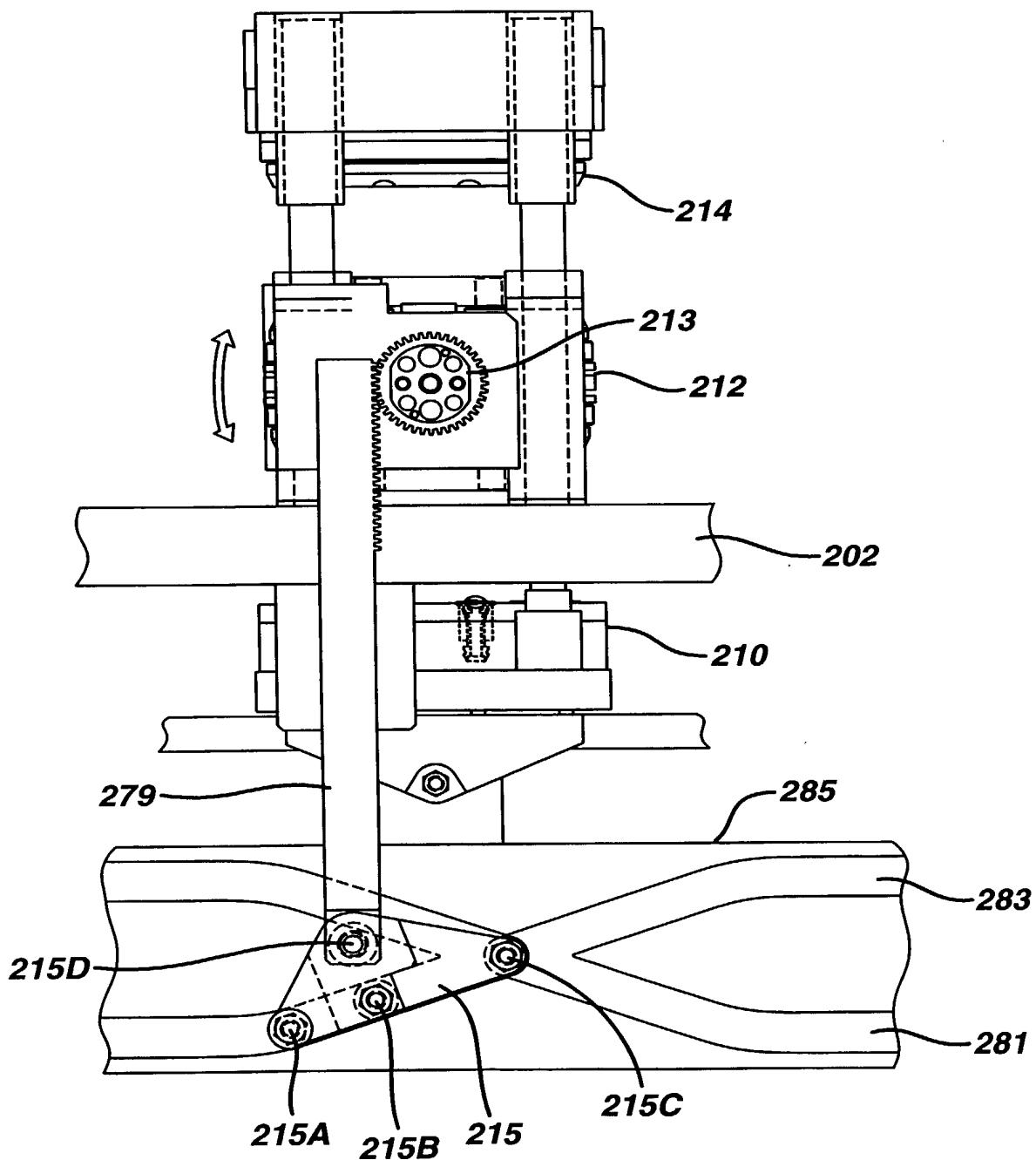


FIG. 36

**FIG. 40**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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**FIG. 41**

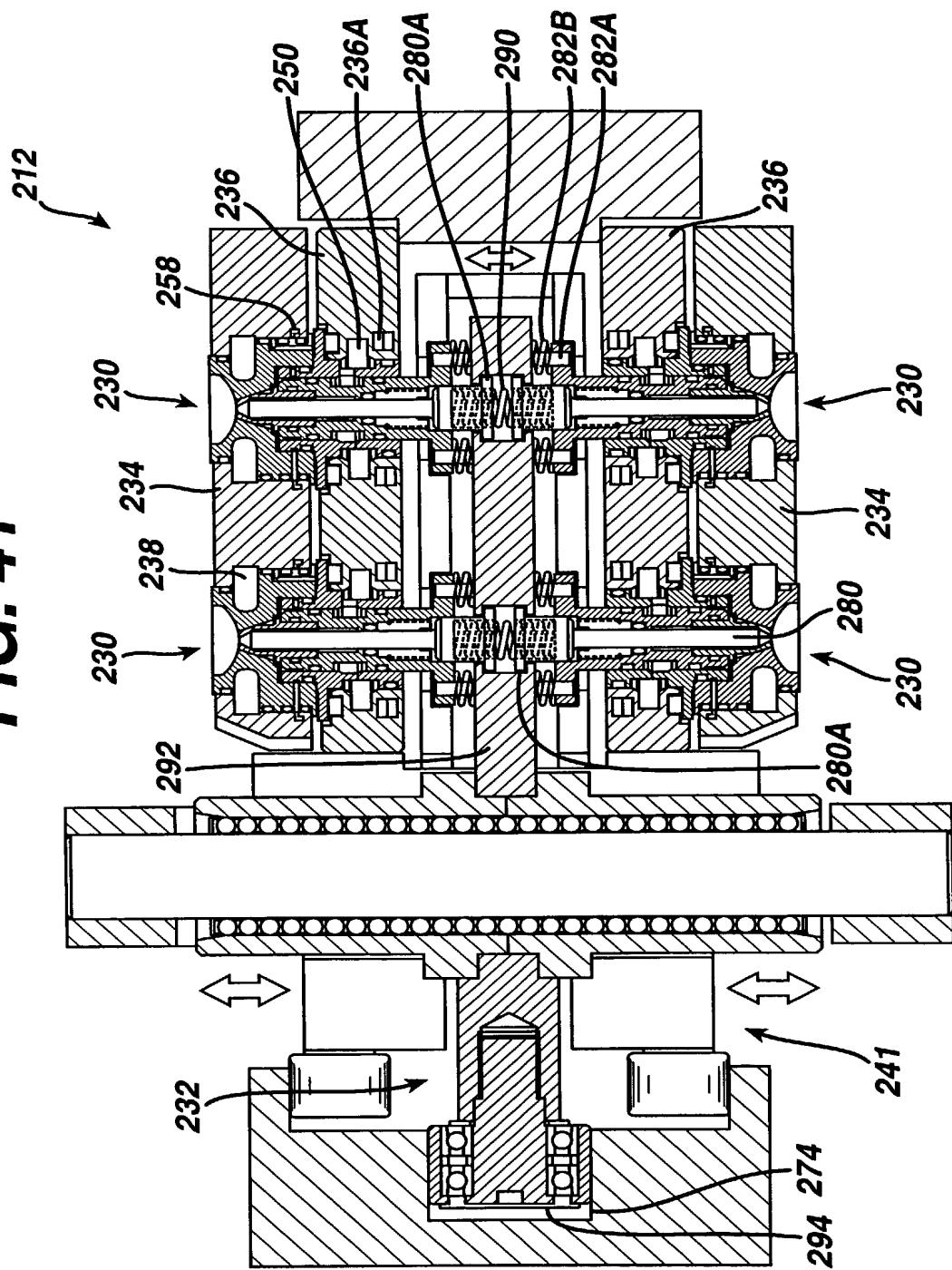
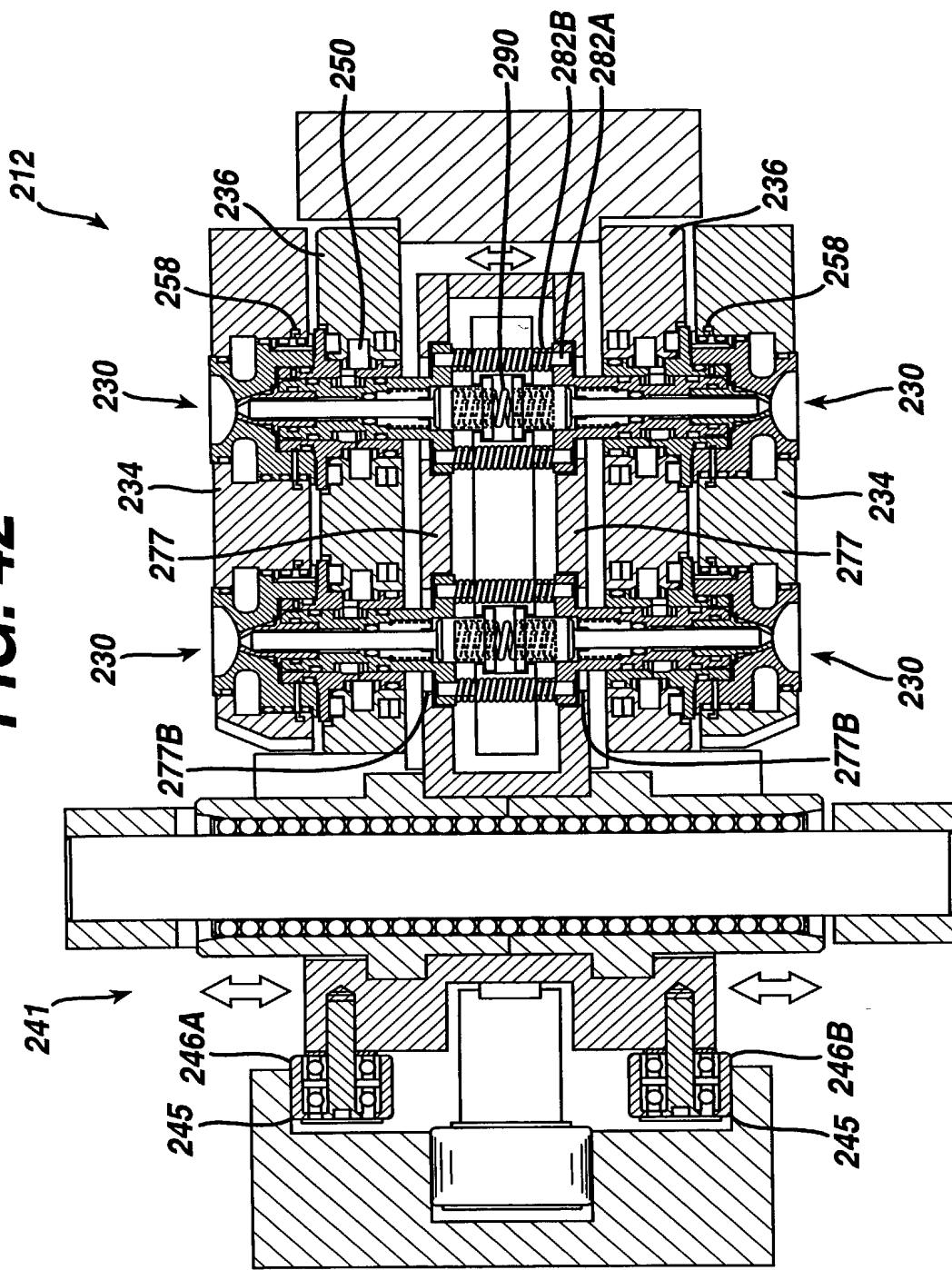


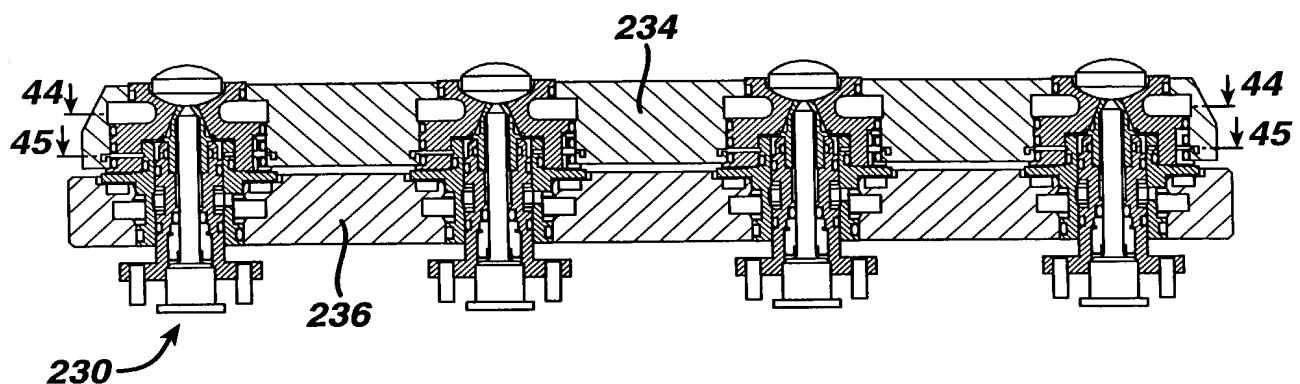
FIG. 42



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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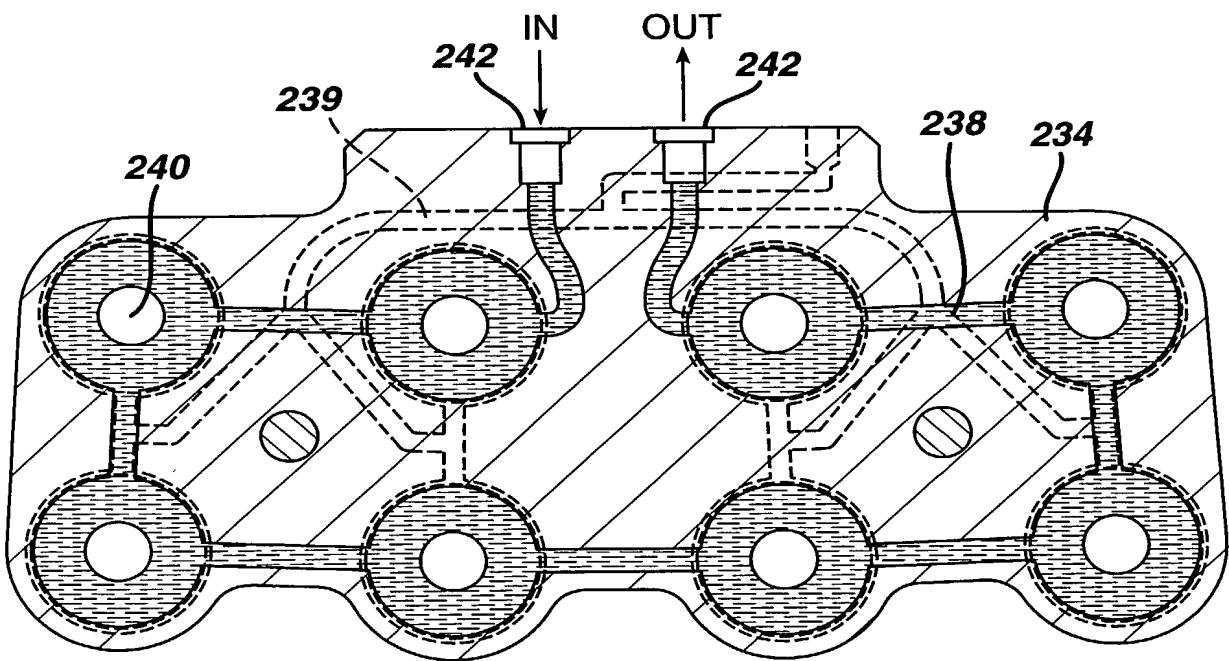
**FIG. 43**



**TITLE:** Systems, Methods and Apparatuses for...  
**INVENTOR(S):** Sowden, et al.  
**APP#:** 09/966939  
**ATTY:** S. E. Hayner      **TEL. #:** 732-524-2242  
**DOCKET #:** MCP-0242      **CUST. #:** 000027777

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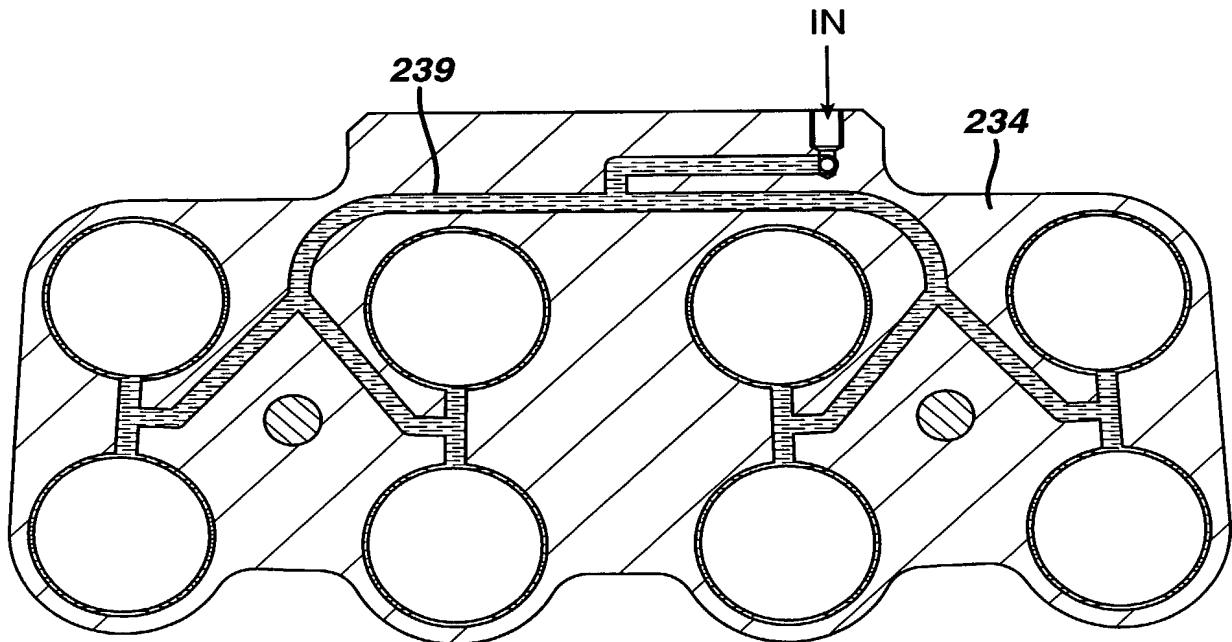
**FIG. 44**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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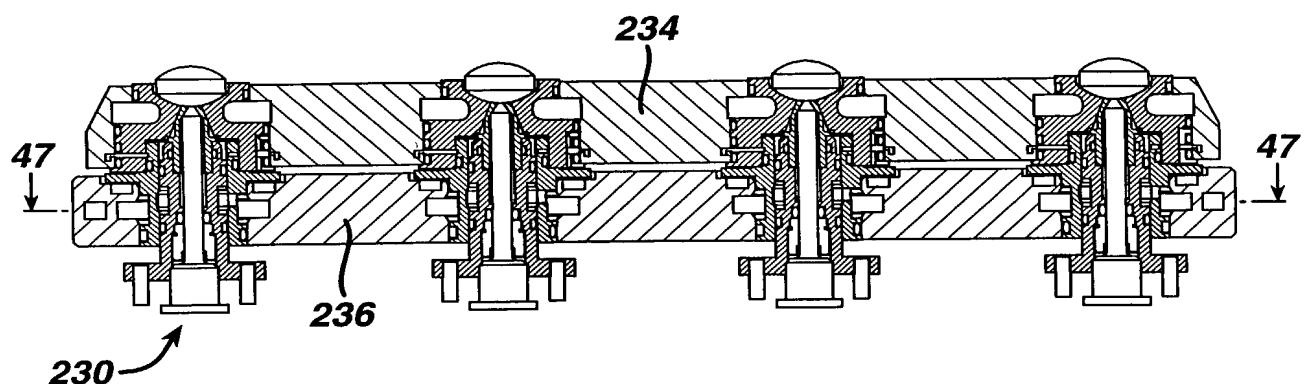
**FIG. 45**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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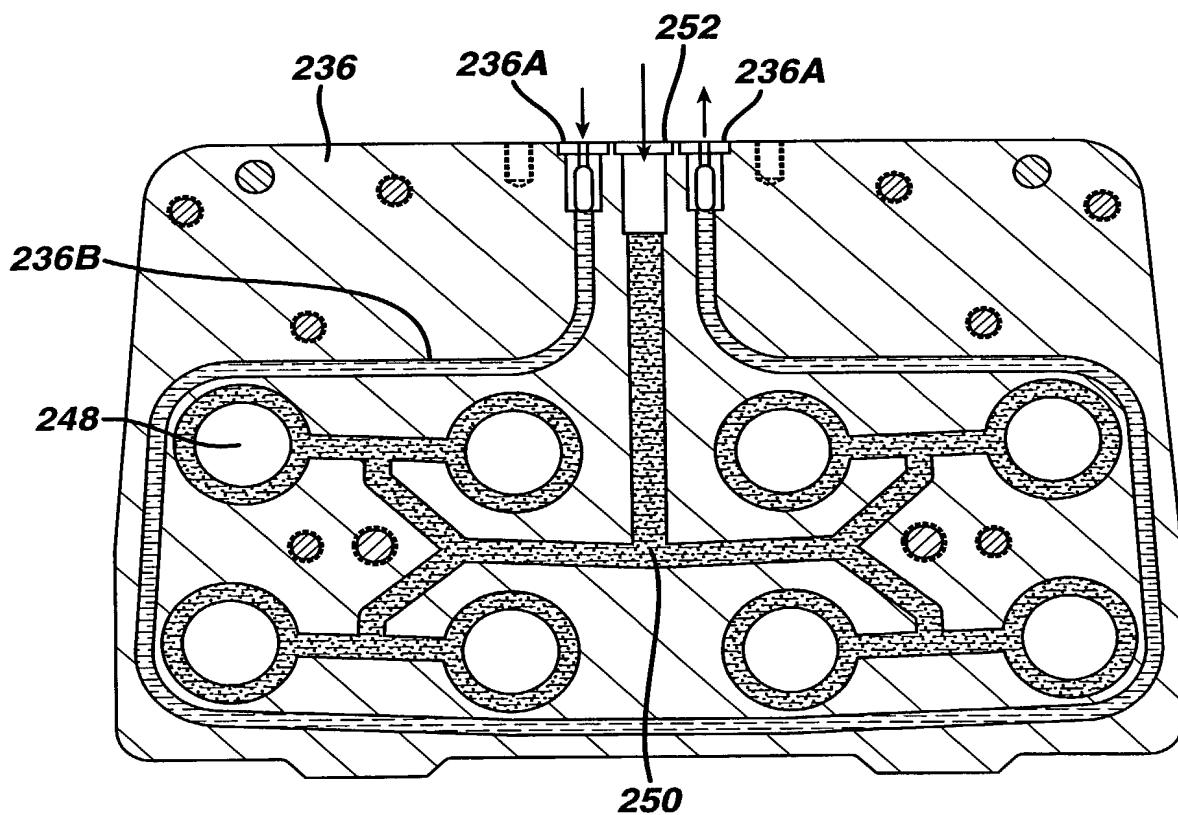
## FIG. 46



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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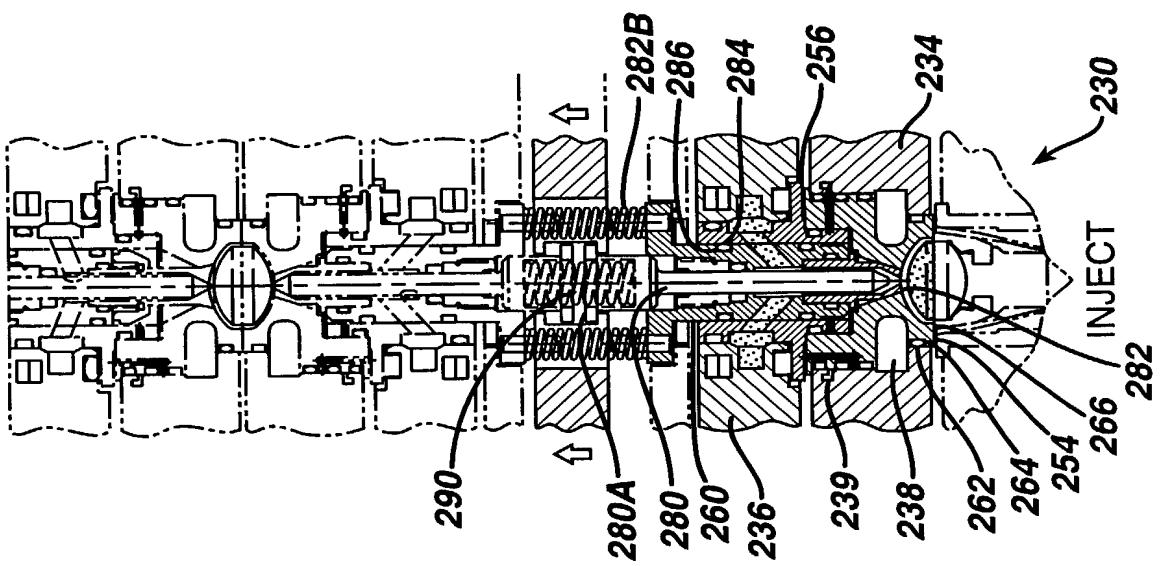
## FIG. 47



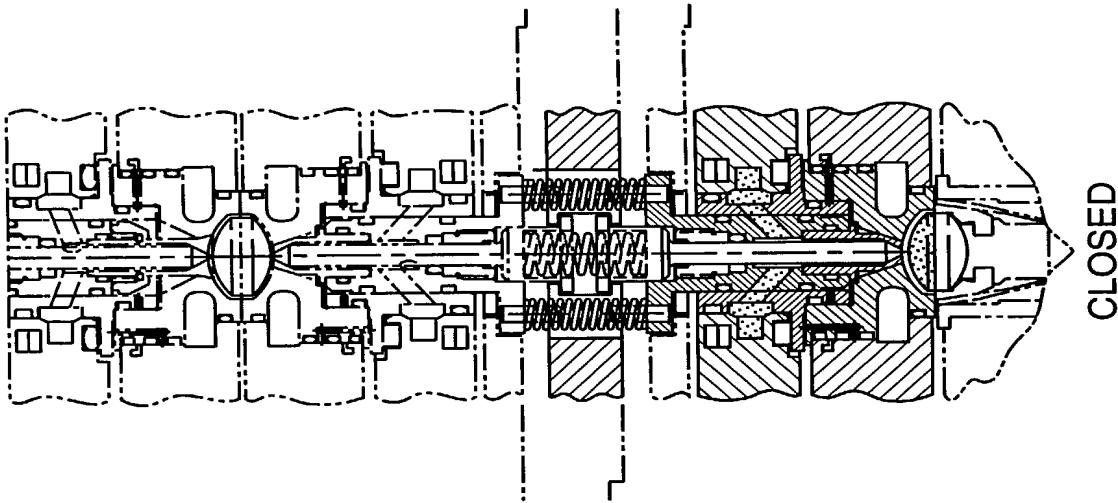
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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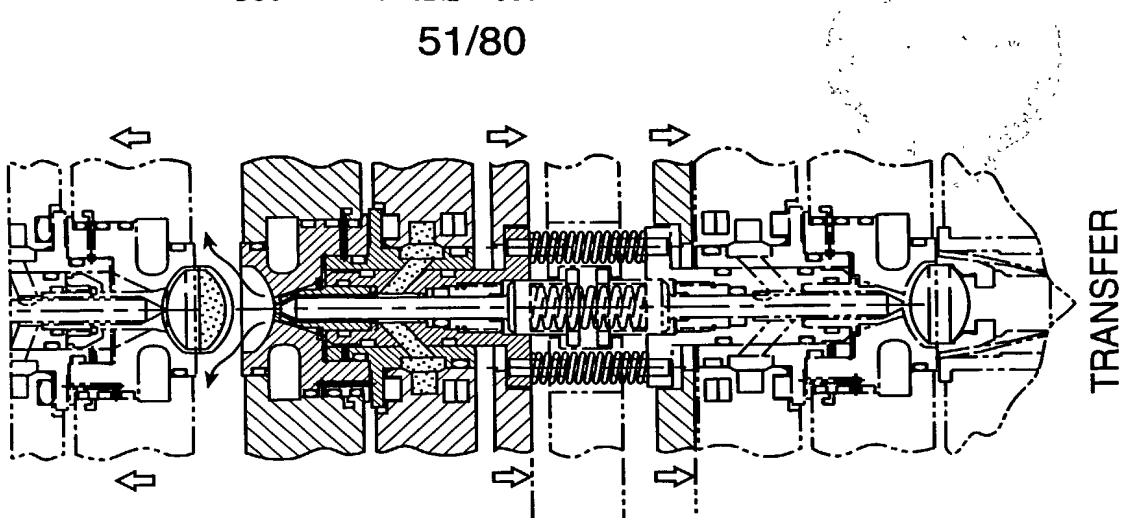
**FIG. 48**

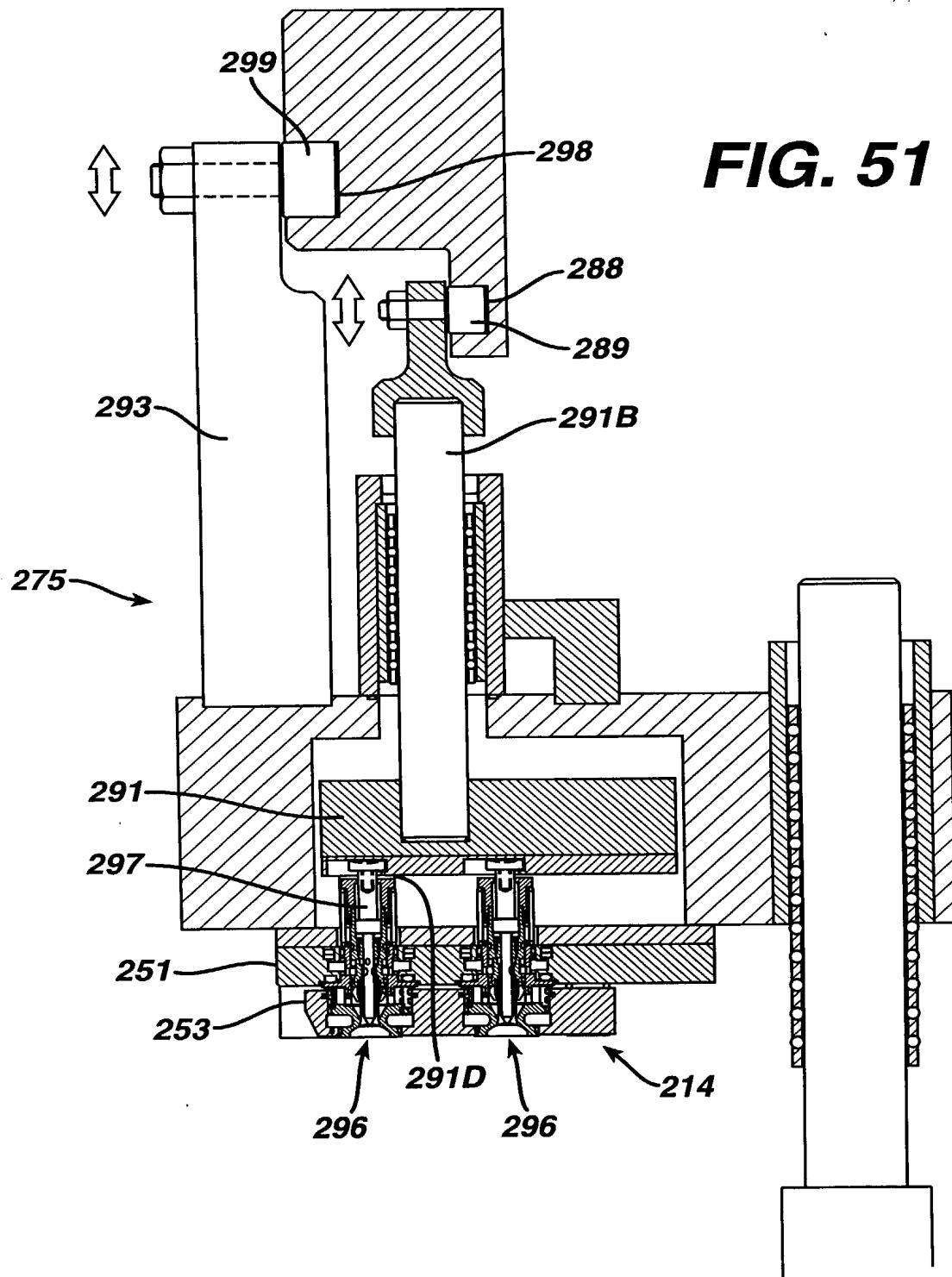


**FIG. 49**



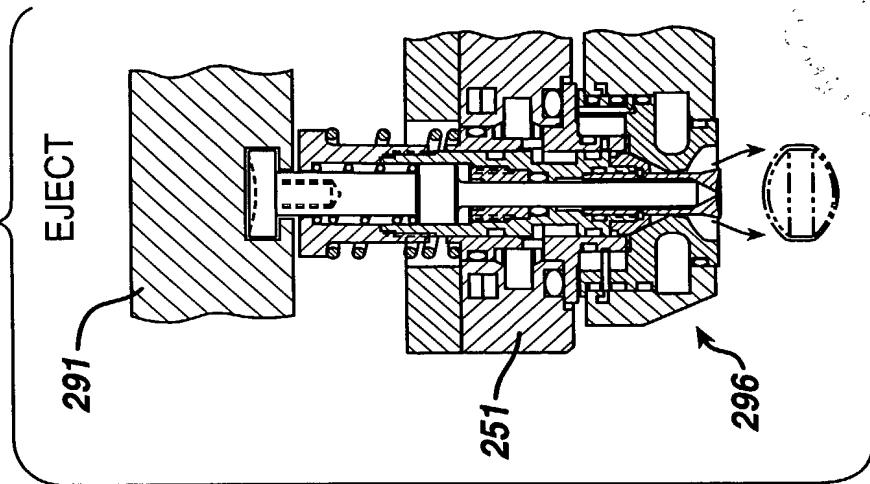
**FIG. 50**



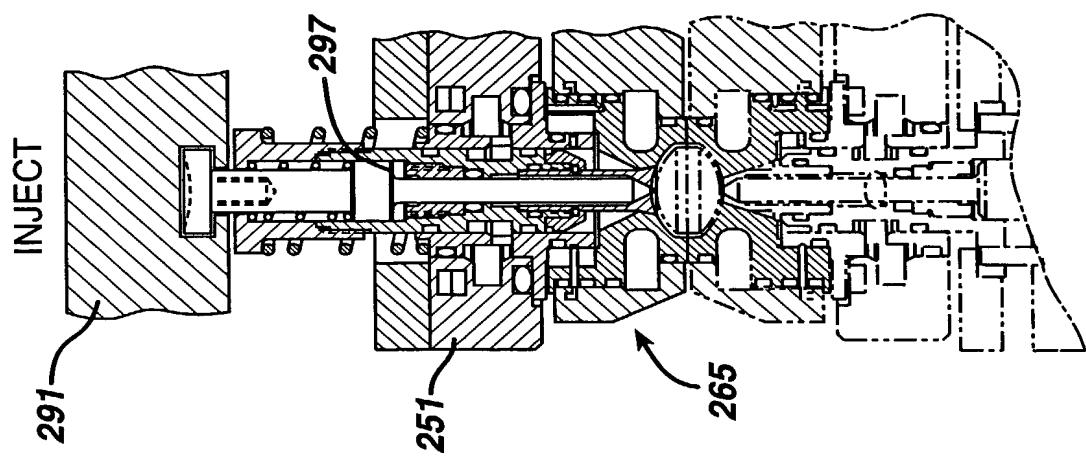


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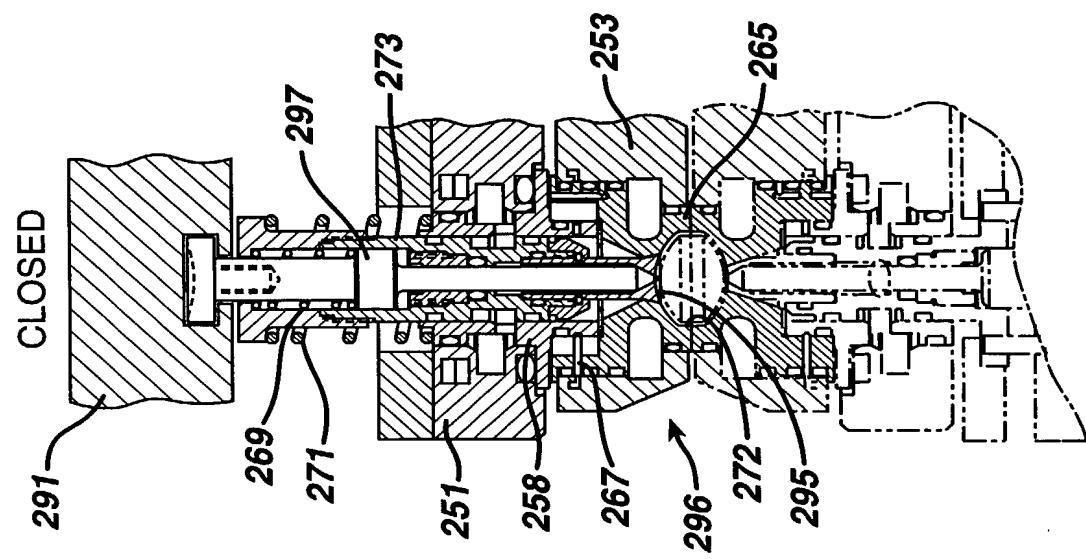
**FIG. 54**



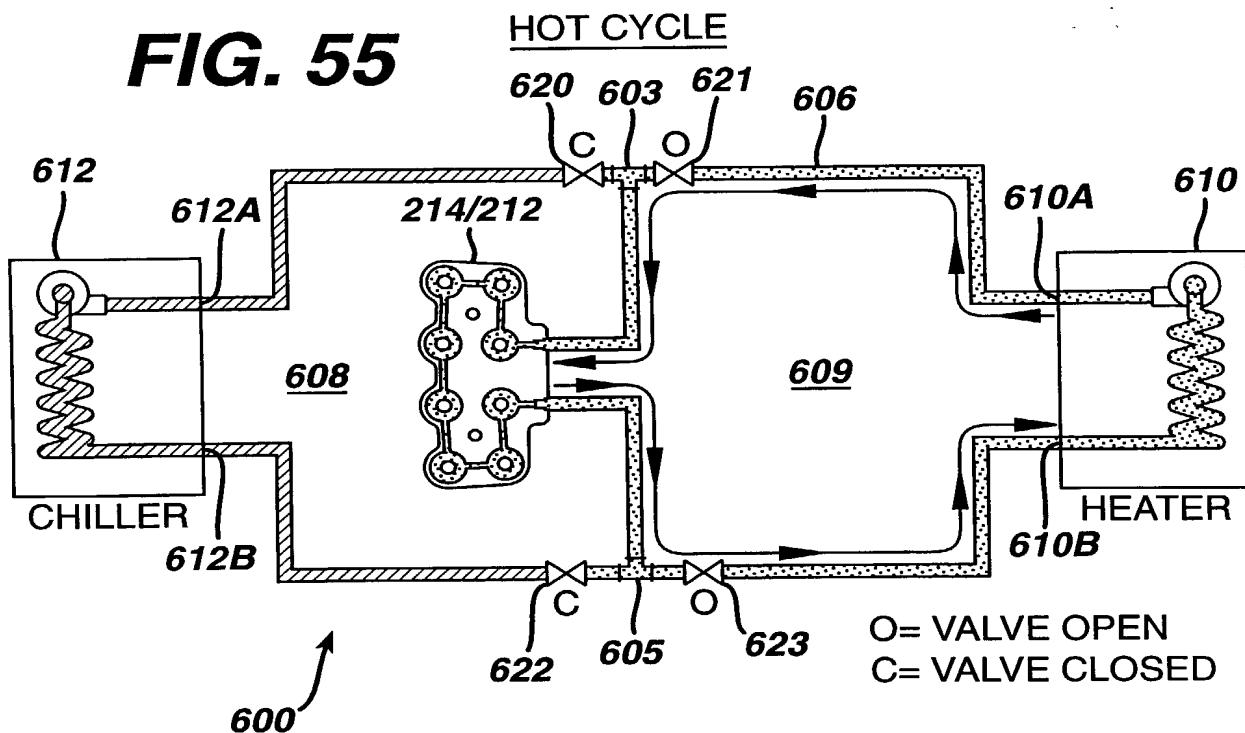
**FIG. 53**



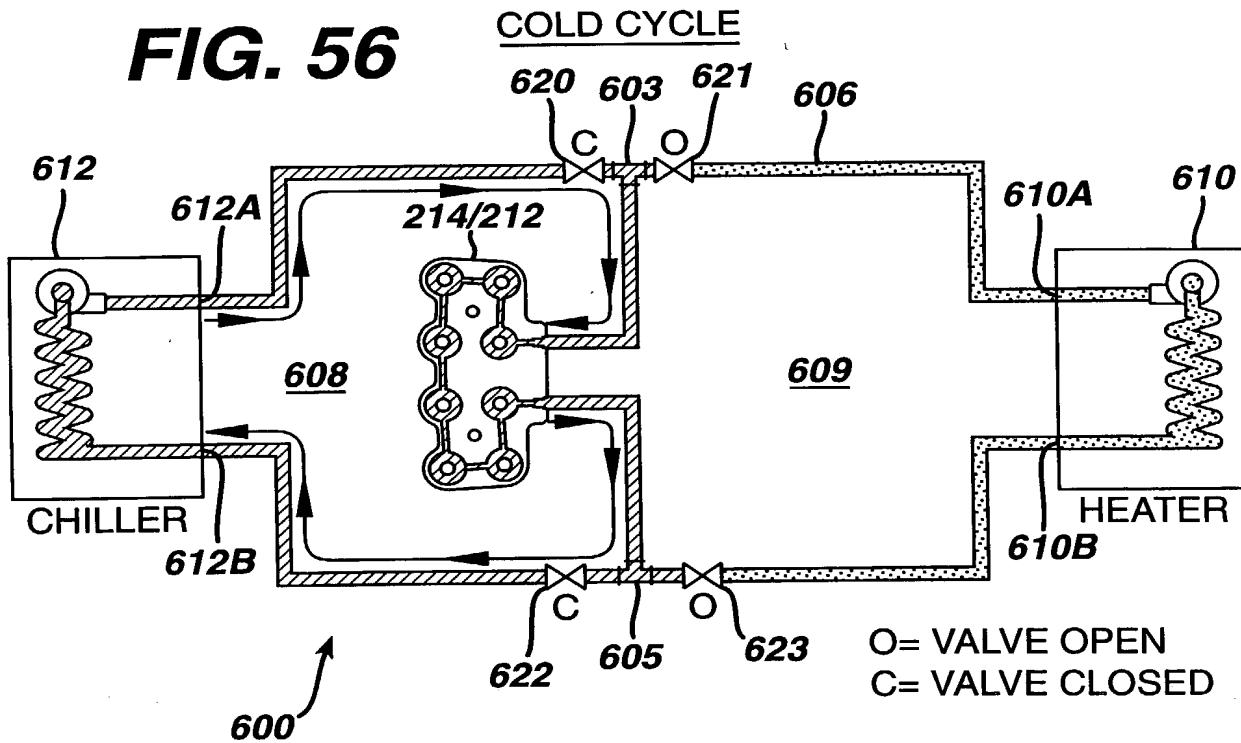
**FIG. 52**



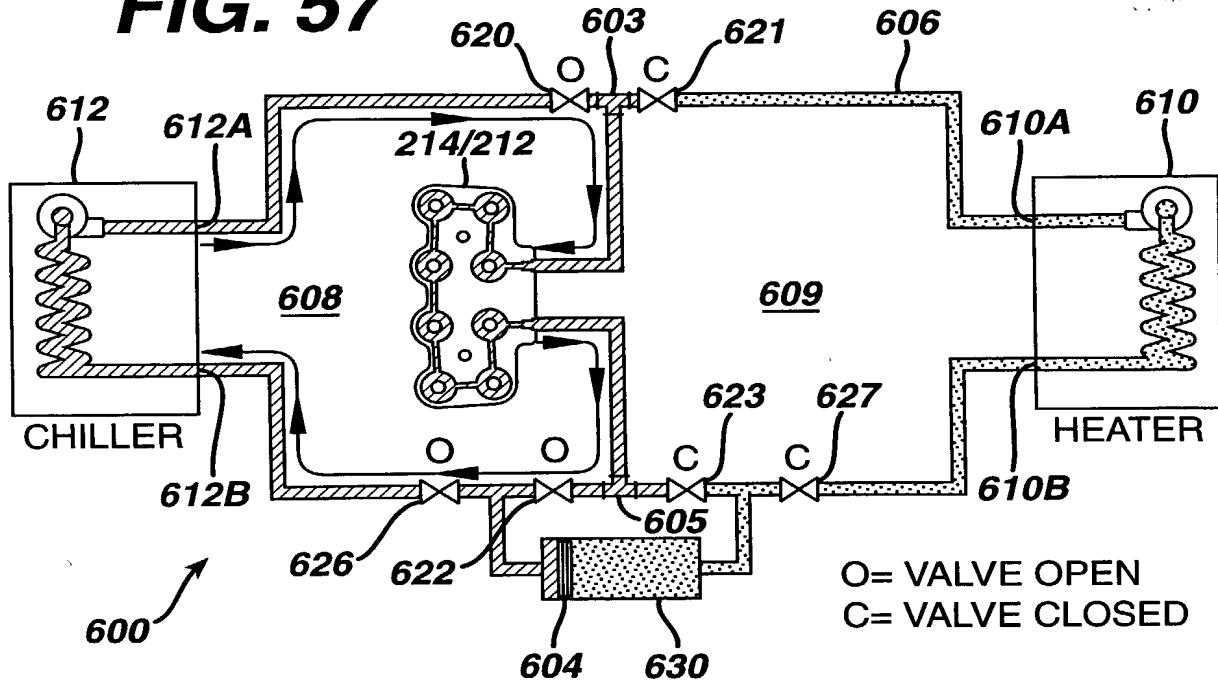
**FIG. 55**



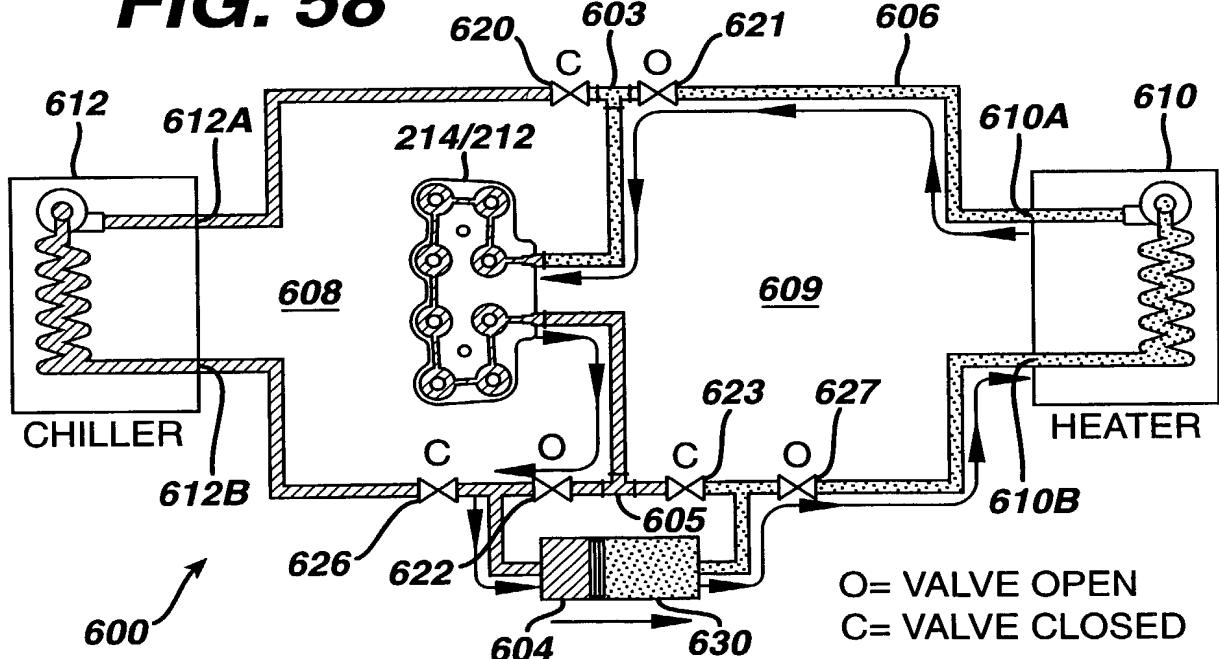
**FIG. 56**



**FIG. 57**



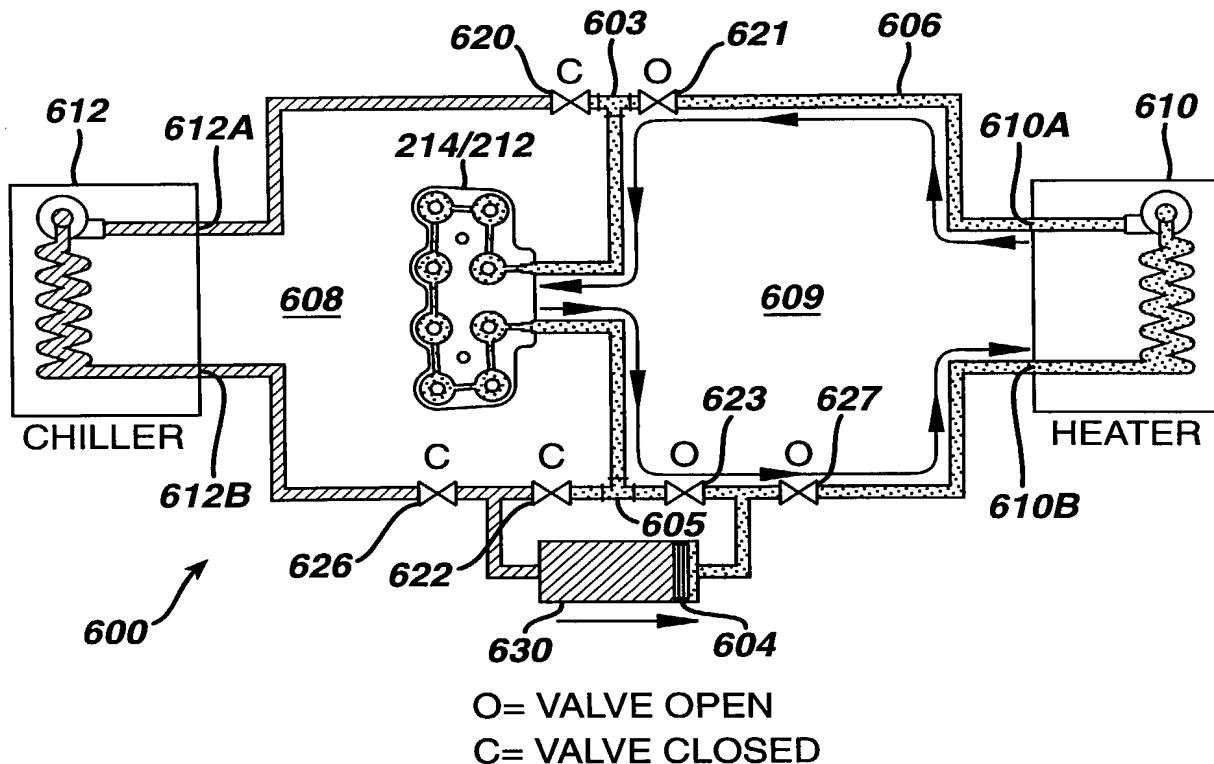
**FIG. 58**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

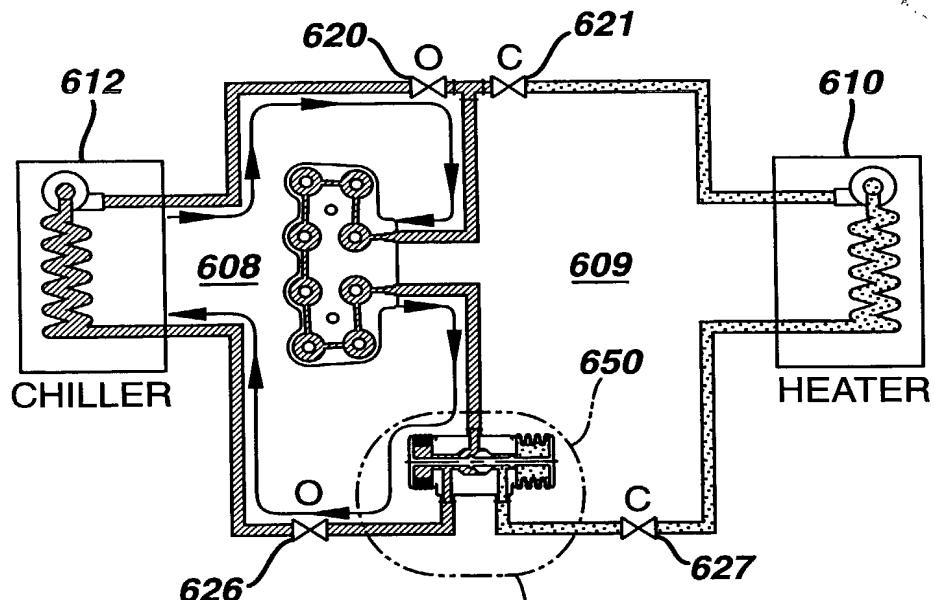
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**FIG. 59**



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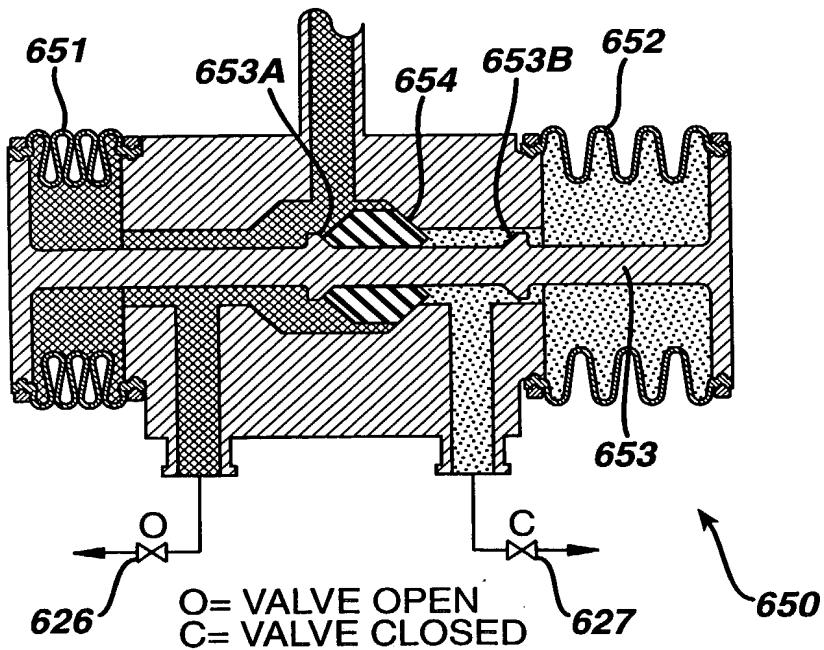
**FIG. 60A**



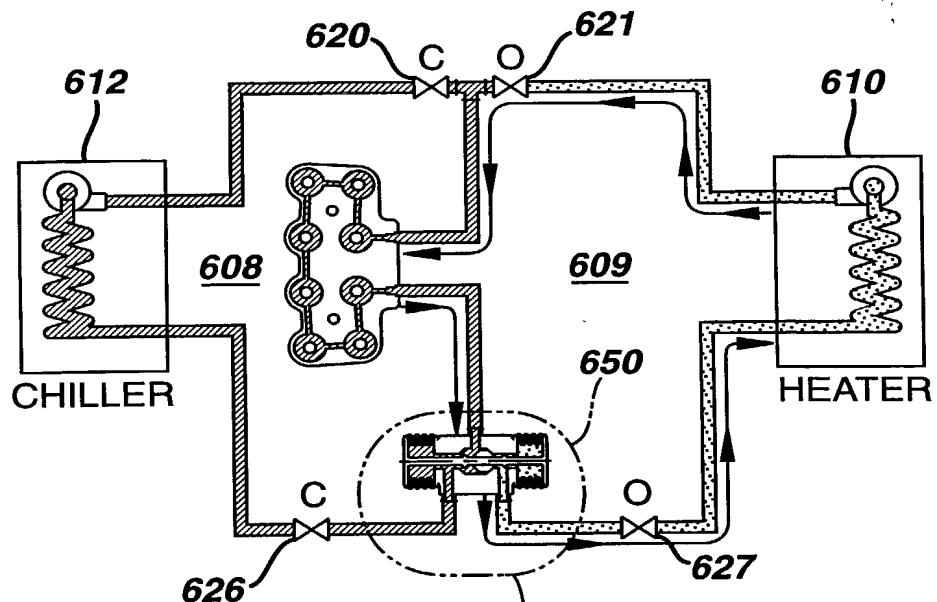
**FIG. 60B**

O = VALVE OPEN  
C = VALVE CLOSED

**FIG. 60B**



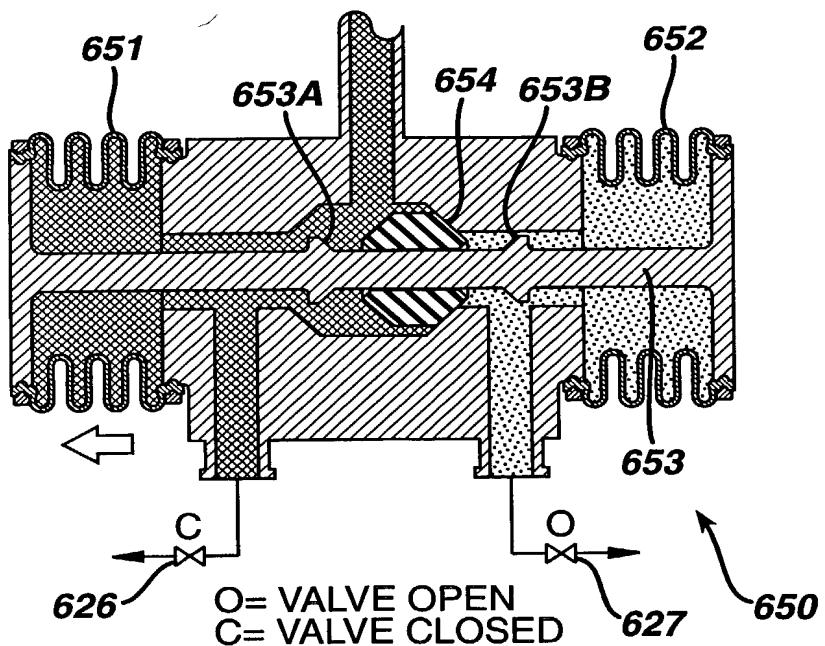
**FIG. 61**



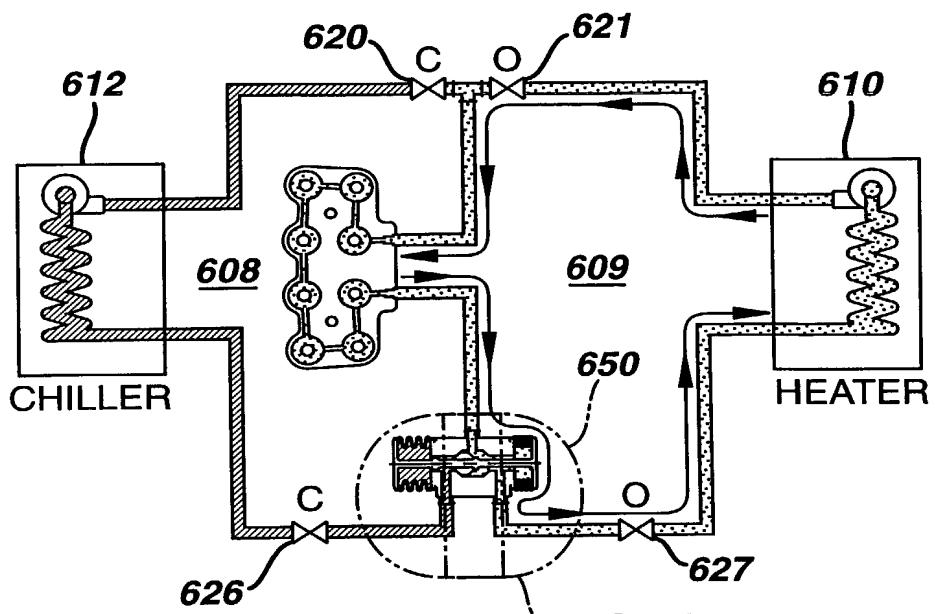
**FIG. 62**

O = VALVE OPEN  
C = VALVE CLOSED

**FIG. 62**



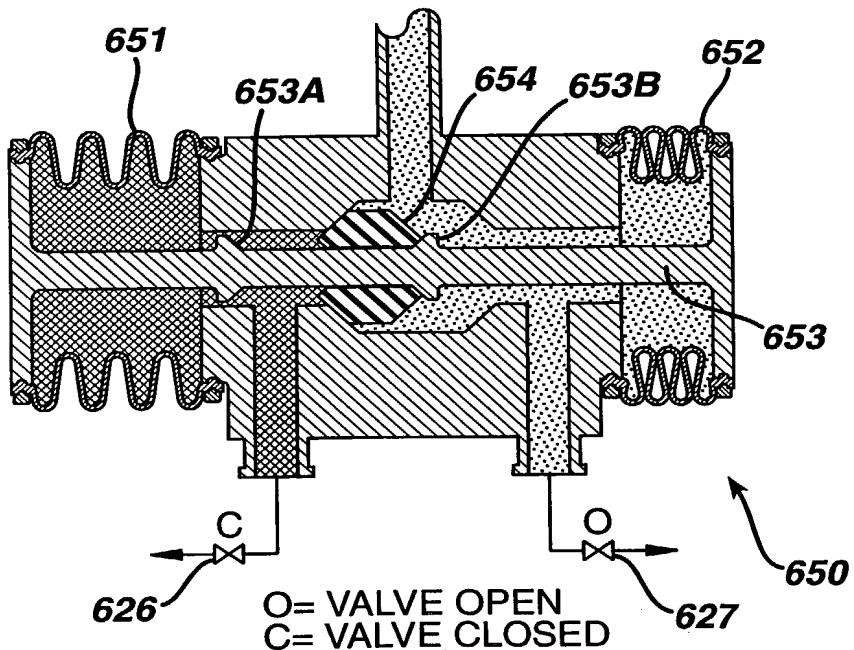
**FIG. 63**



**FIG. 64**

O= VALVE OPEN  
C= VALVE CLOSED

**FIG. 64**

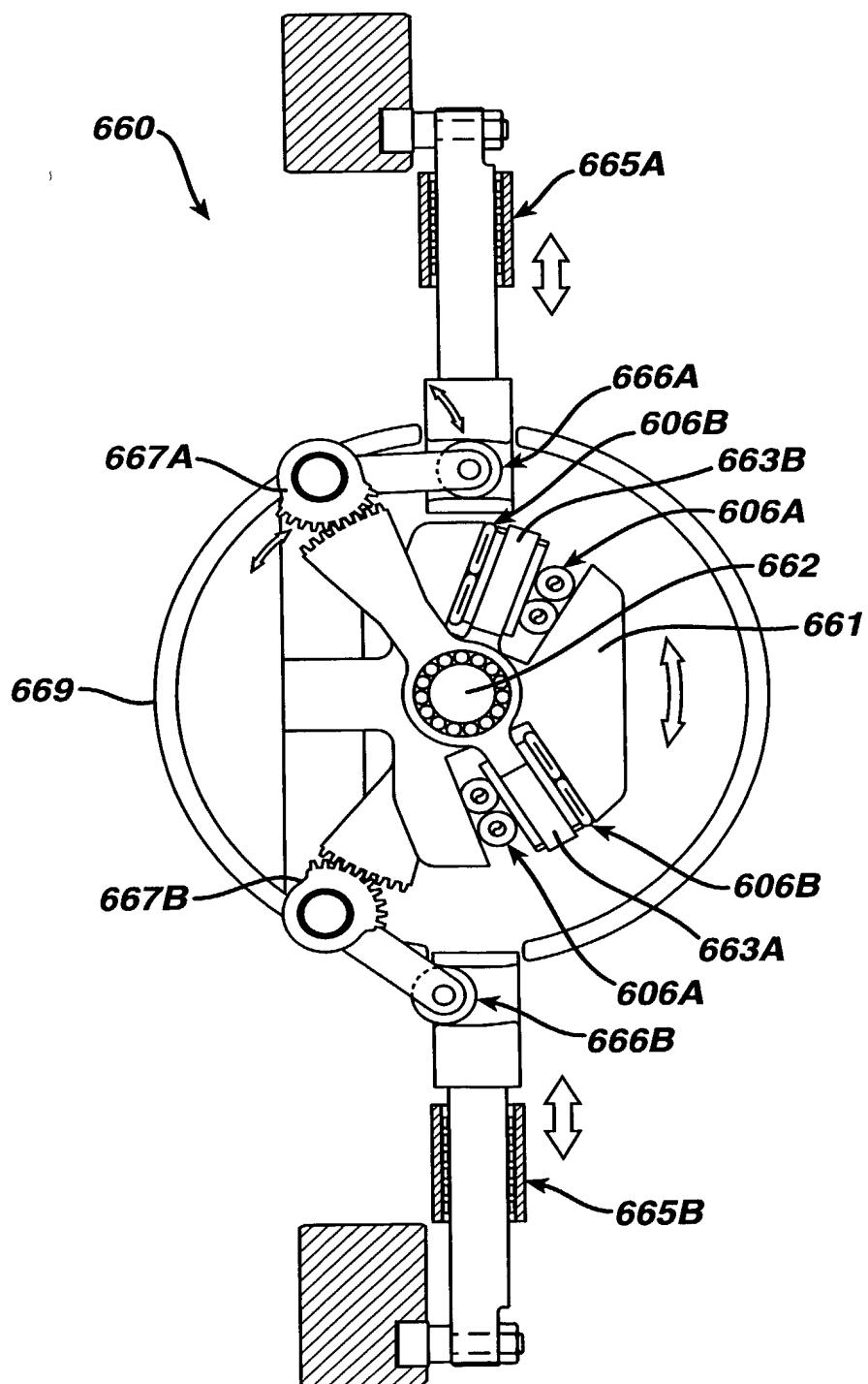


O= VALVE OPEN  
C= VALVE CLOSED

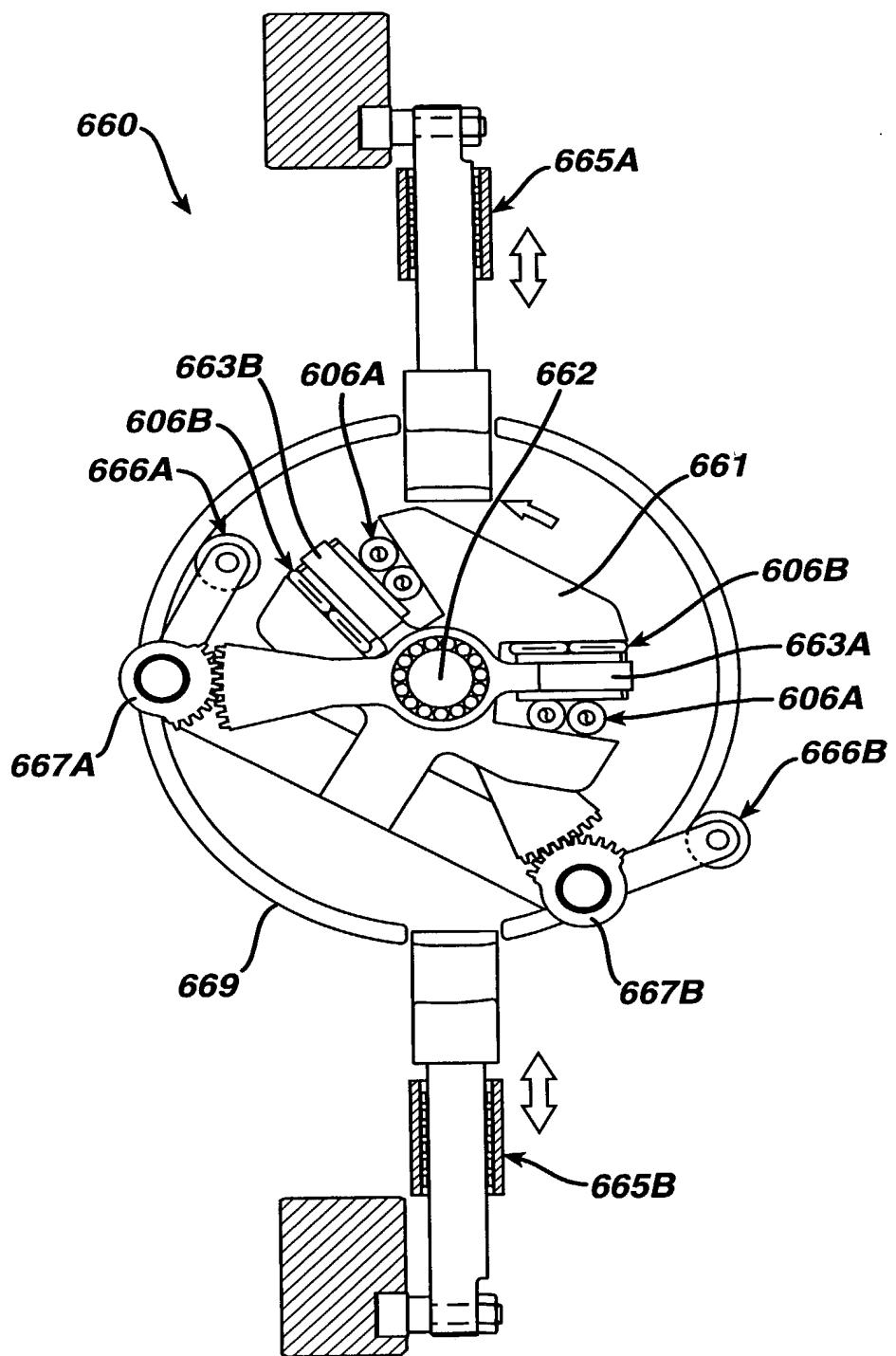
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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## FIG. 65



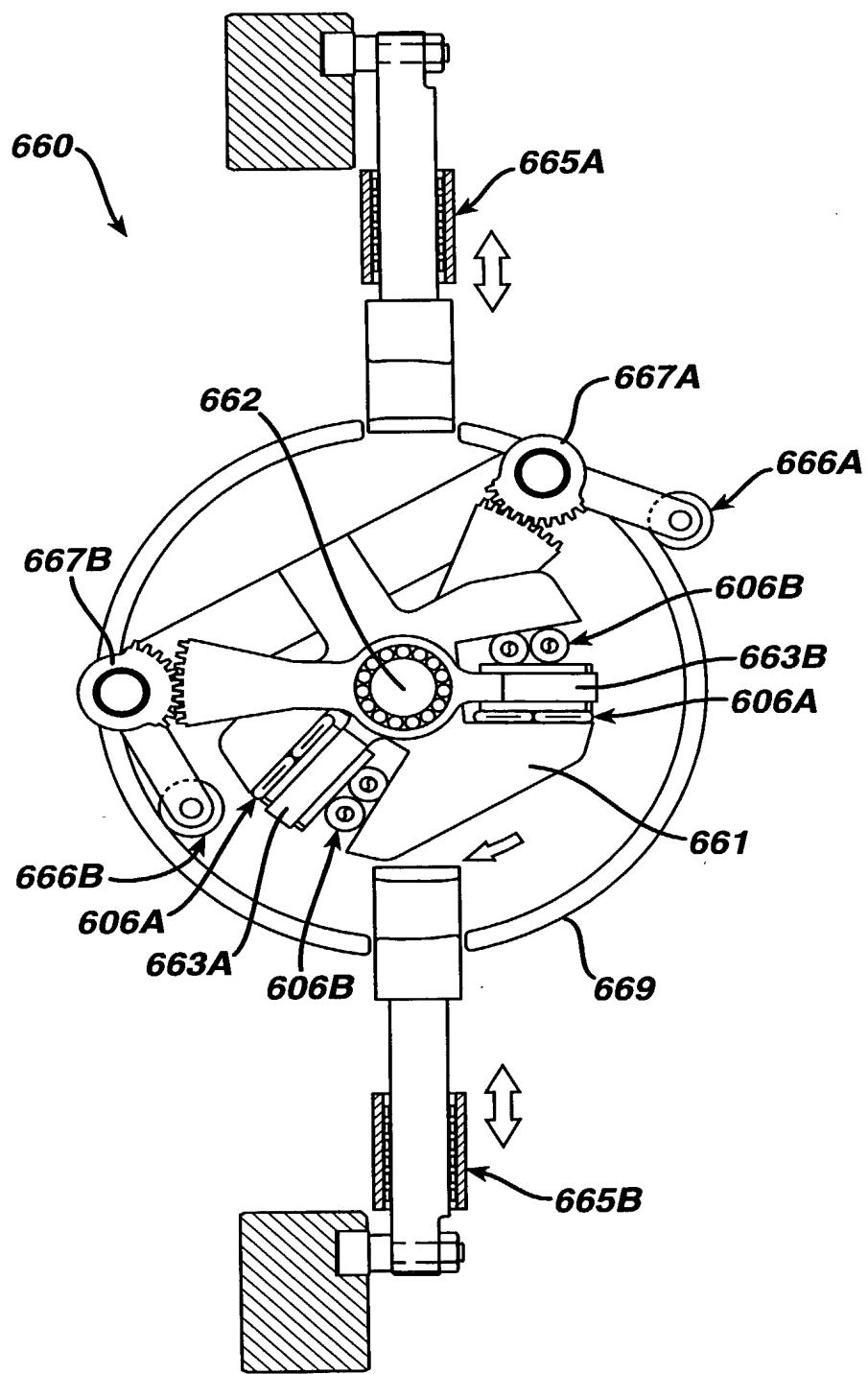
## FIG. 66



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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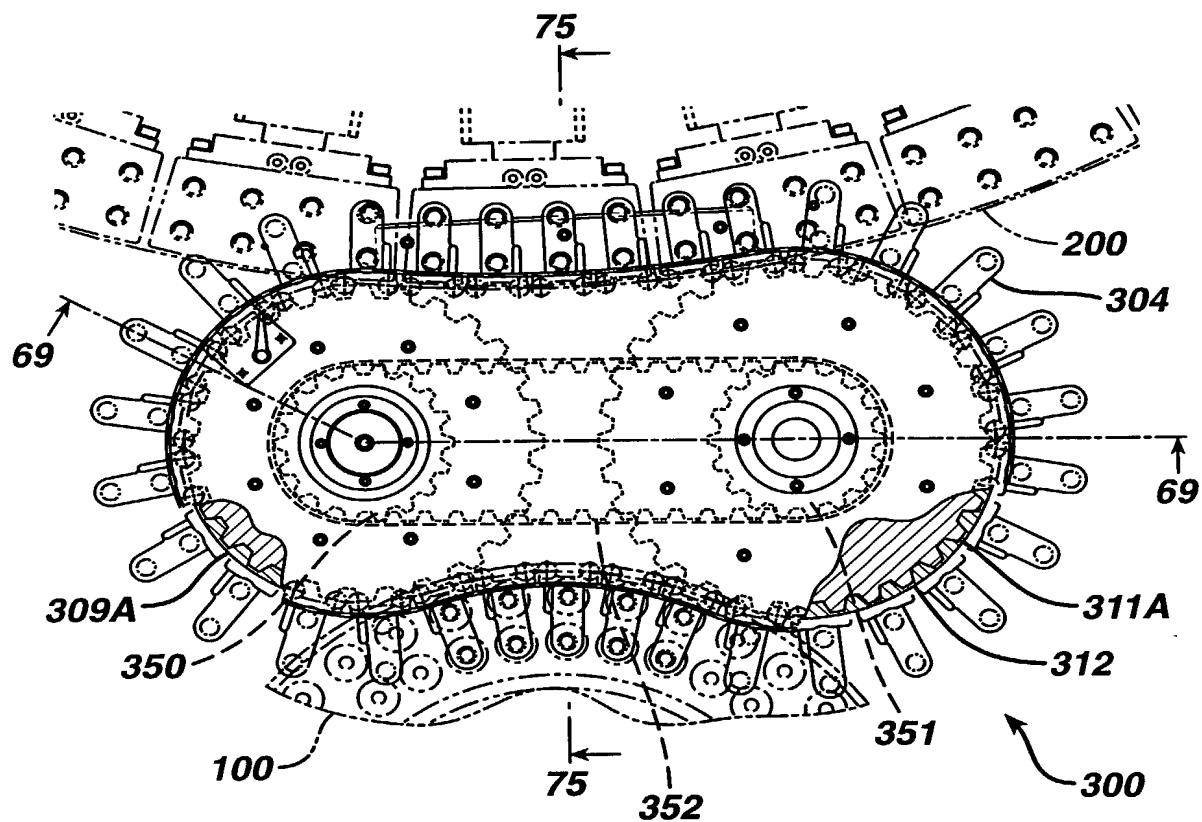
## FIG. 67



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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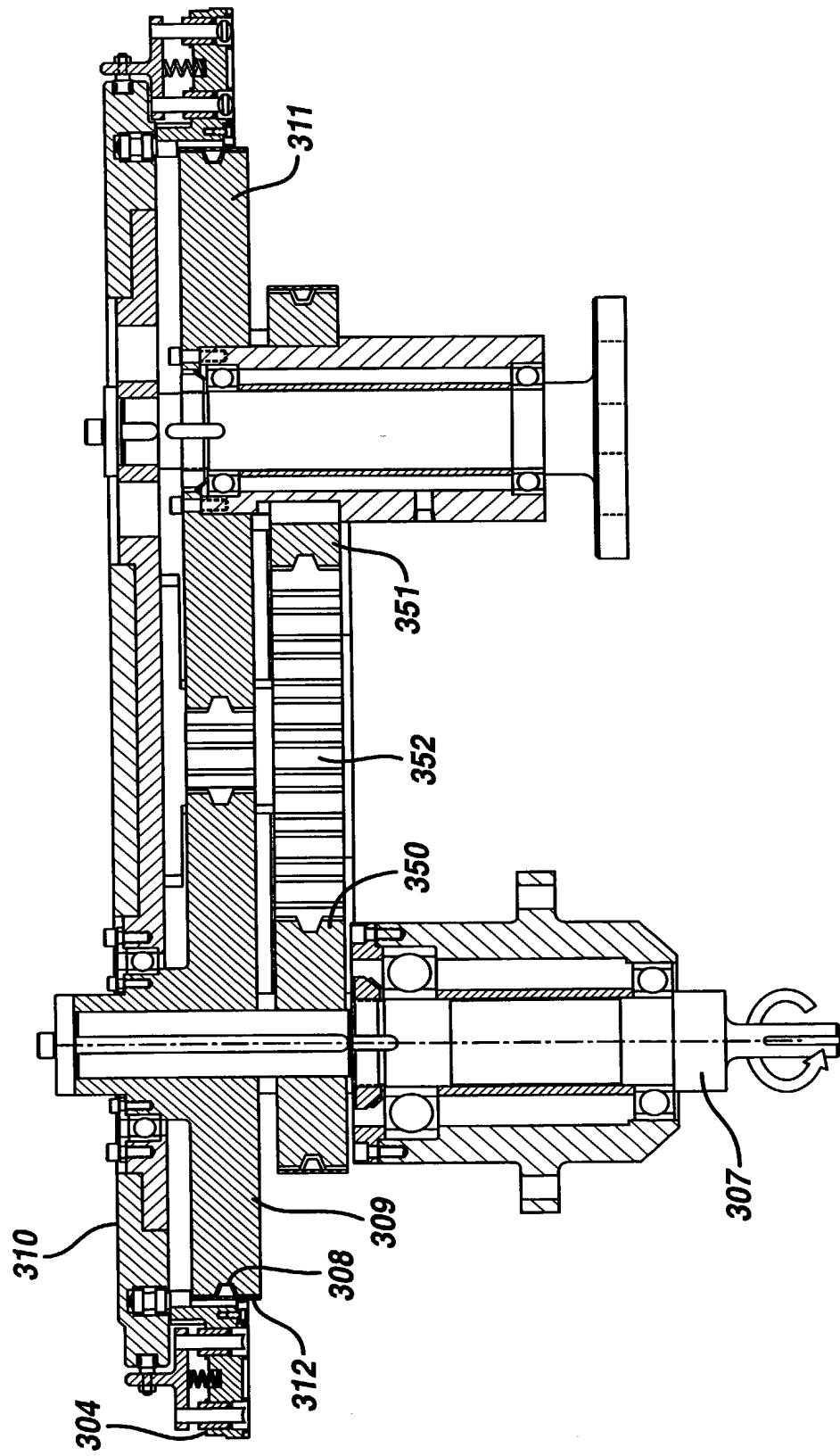
## FIG. 68



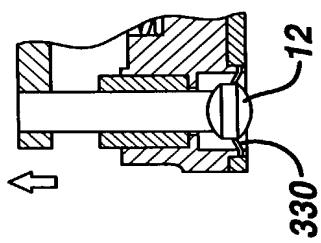
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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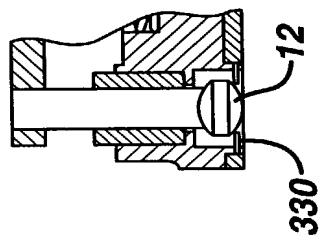
**FIG. 69**



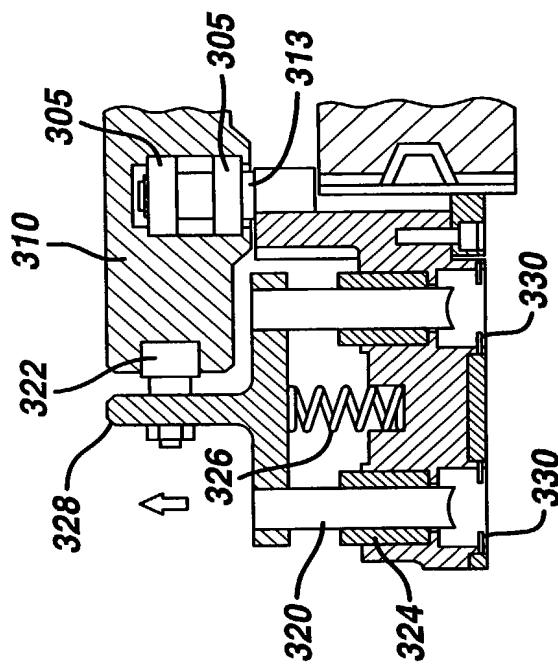
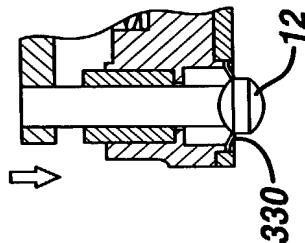
**FIG. 72**



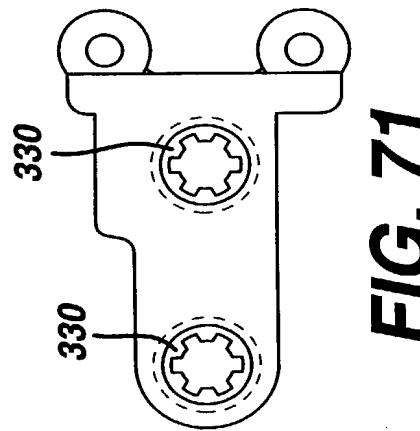
**FIG. 73**



**FIG. 74**



**FIG. 70**



**FIG. 71**

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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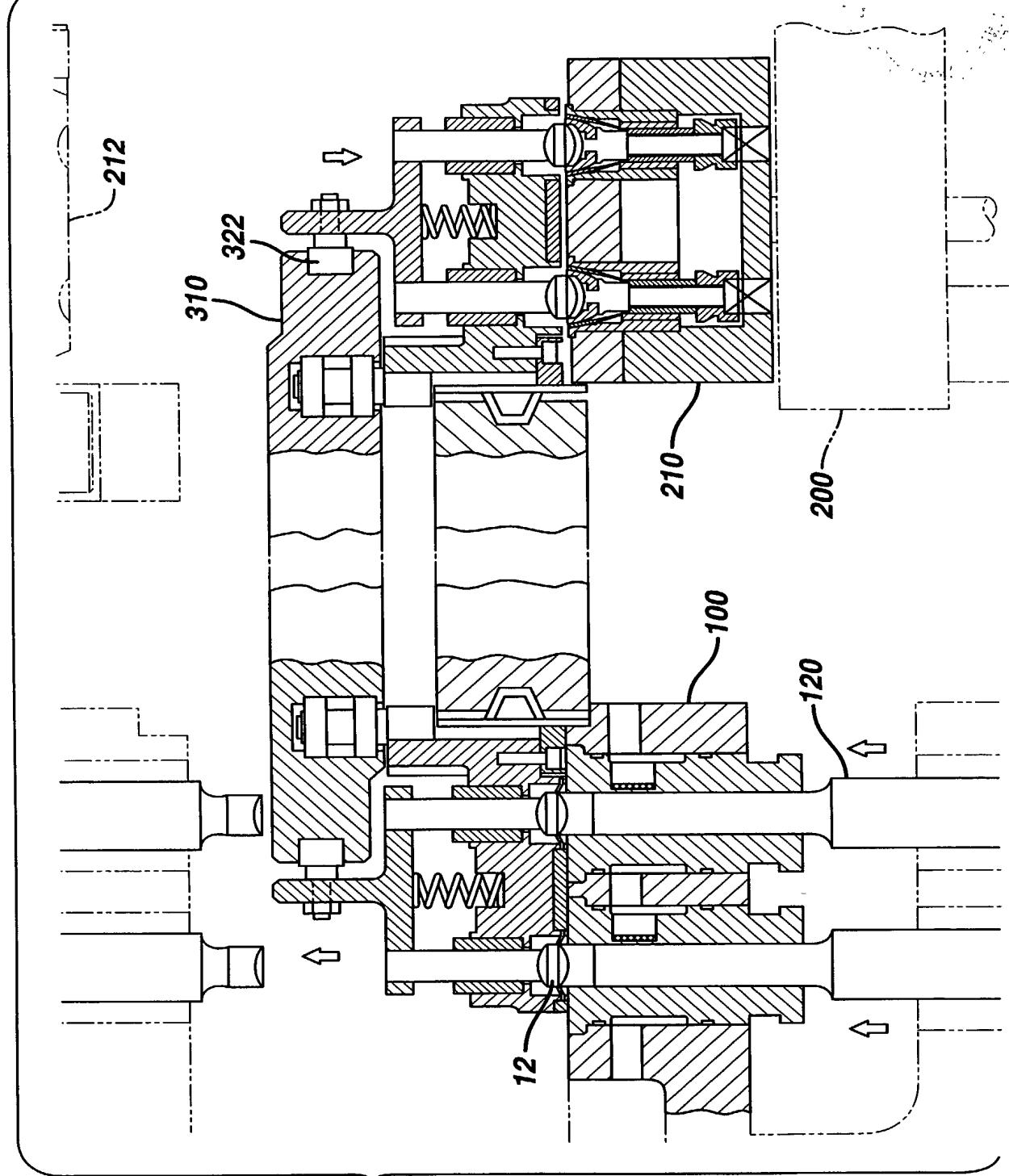
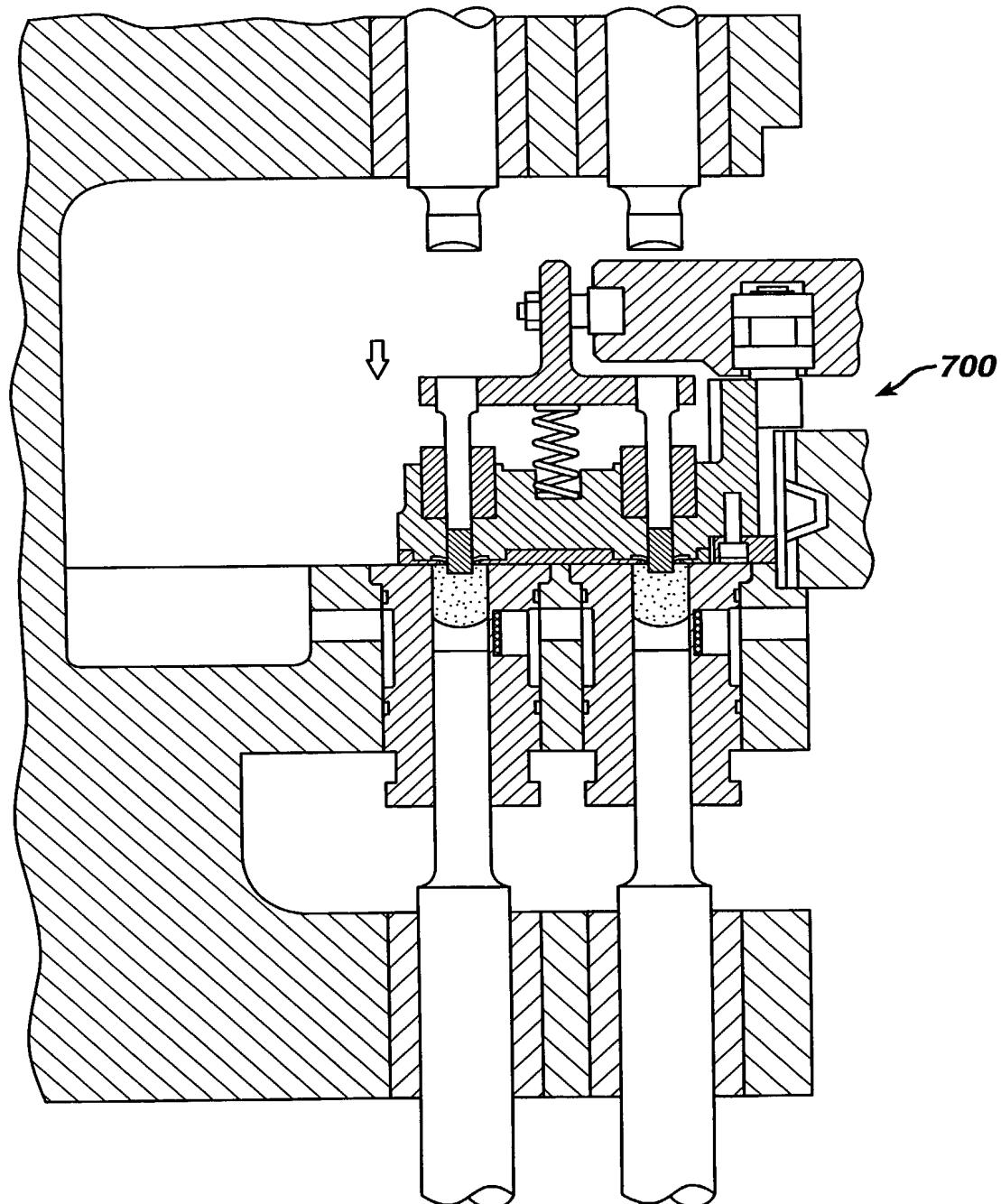


FIG. 75

TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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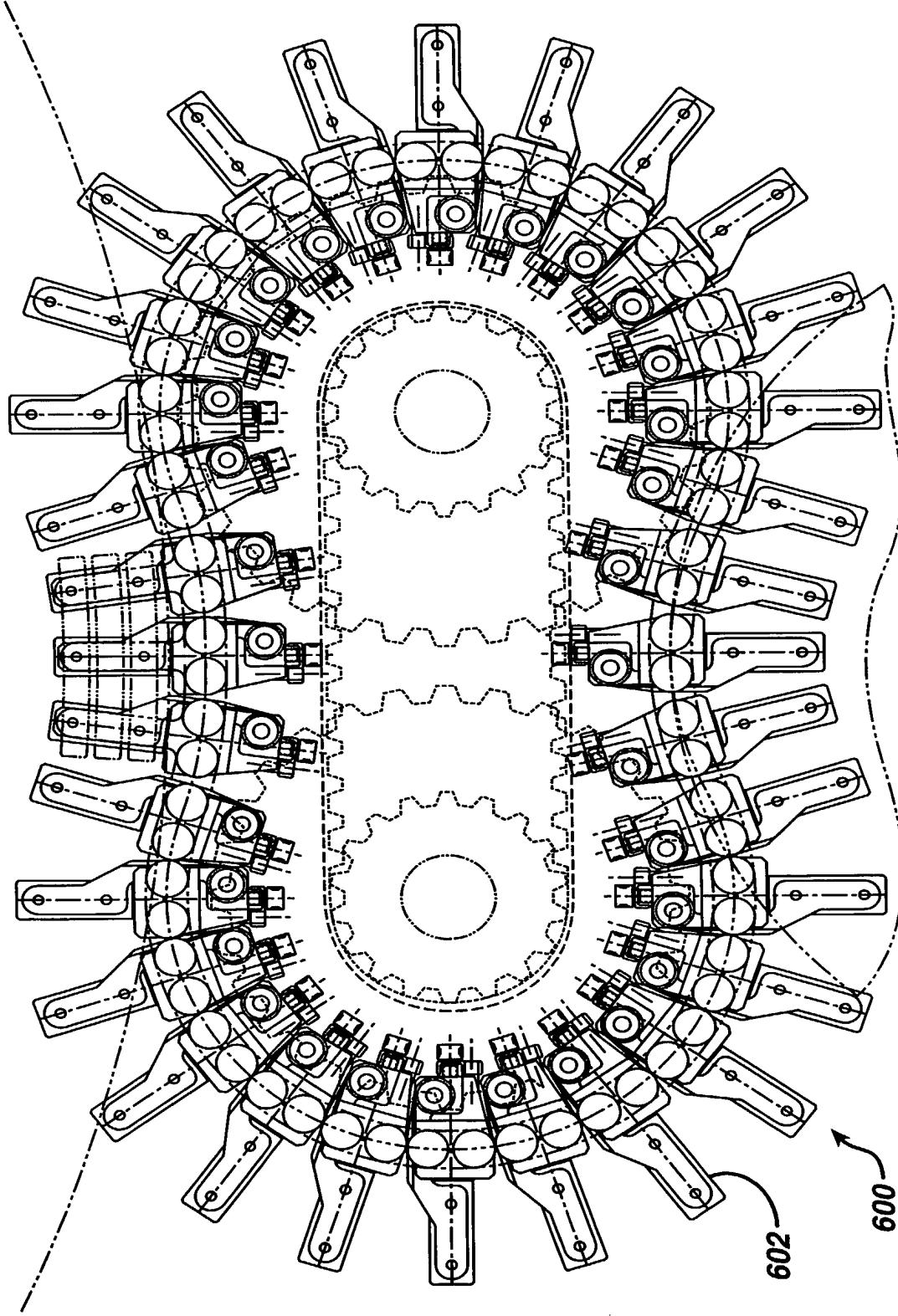
**FIG. 76**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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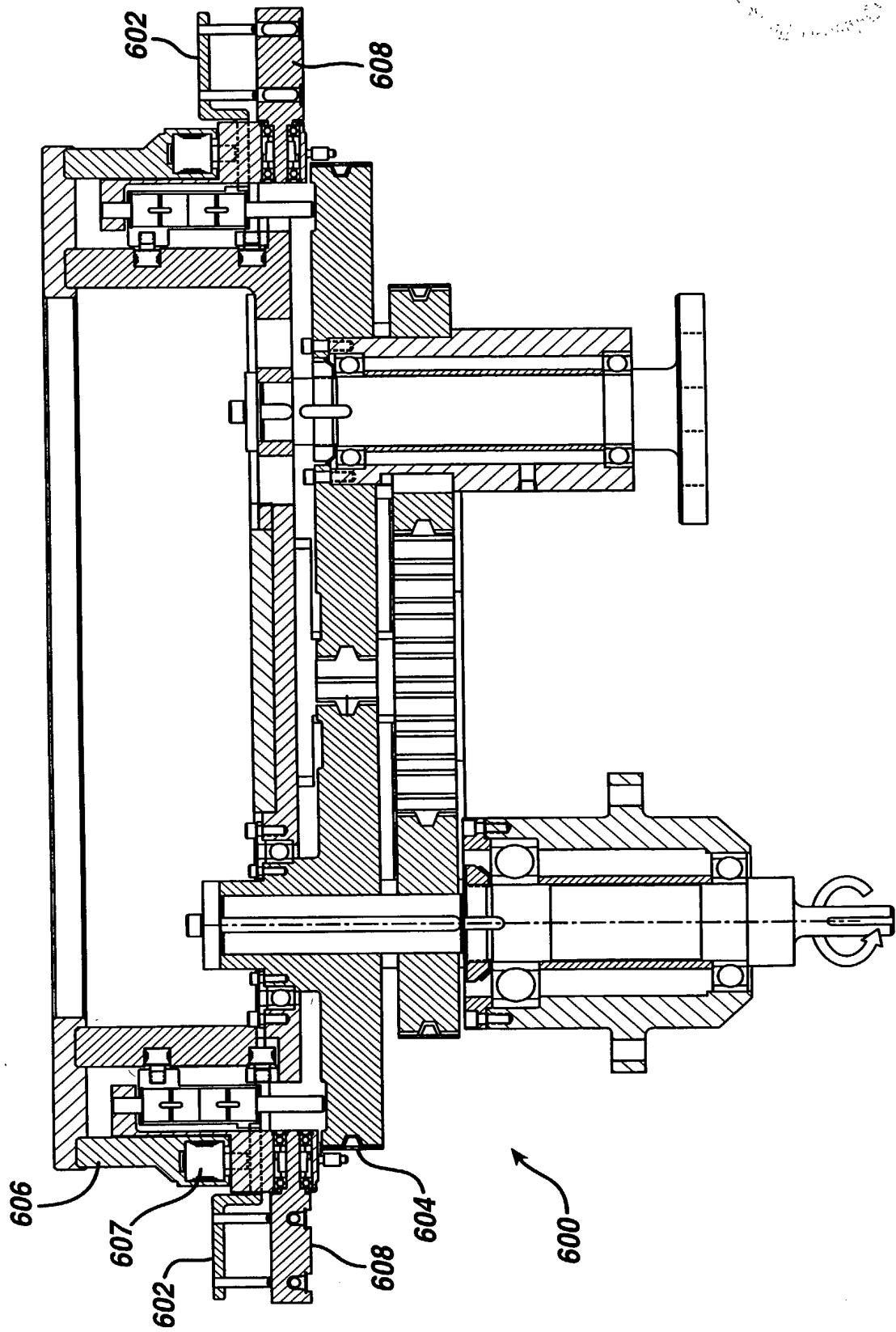
**FIG. 77**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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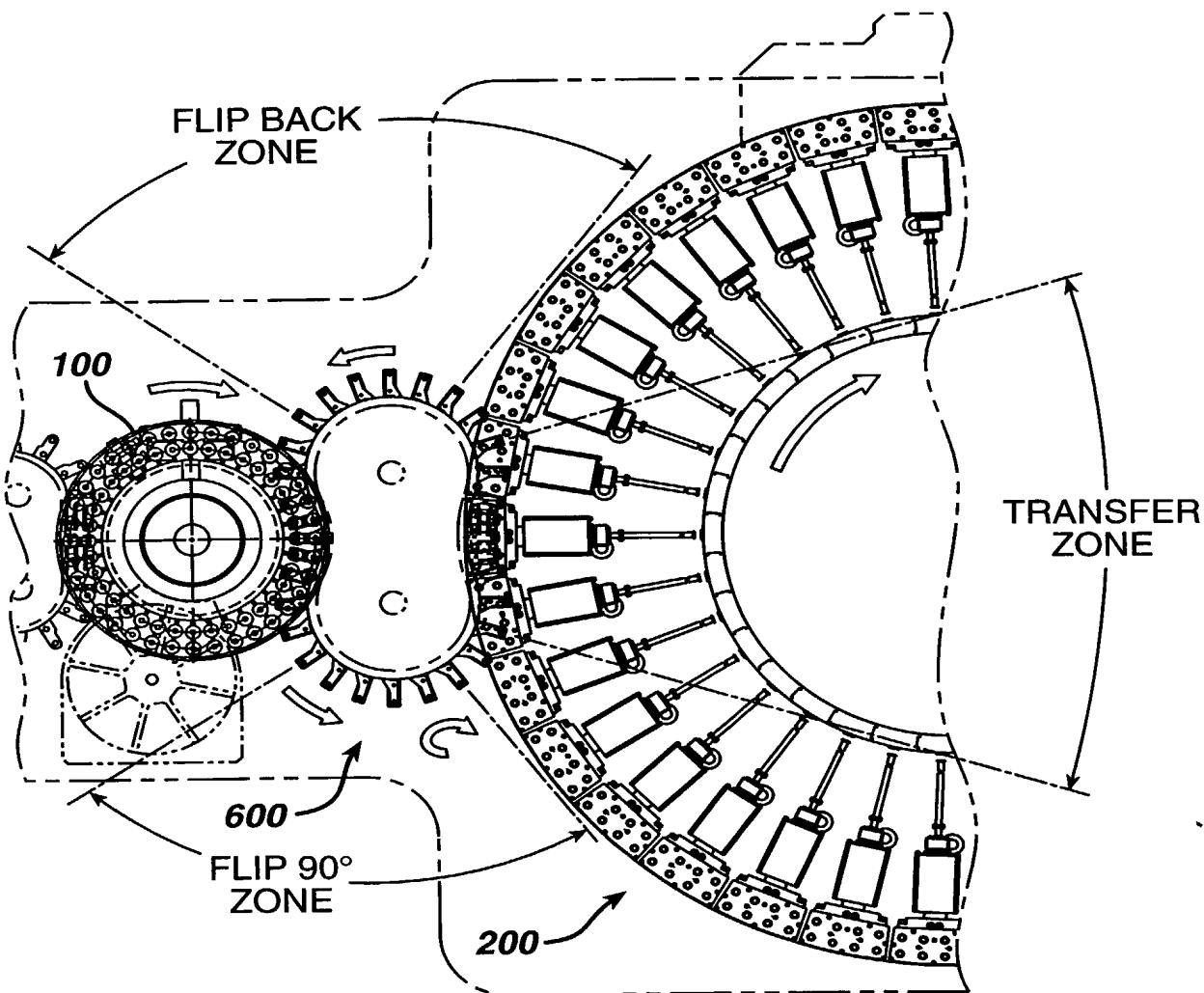
FIG. 78



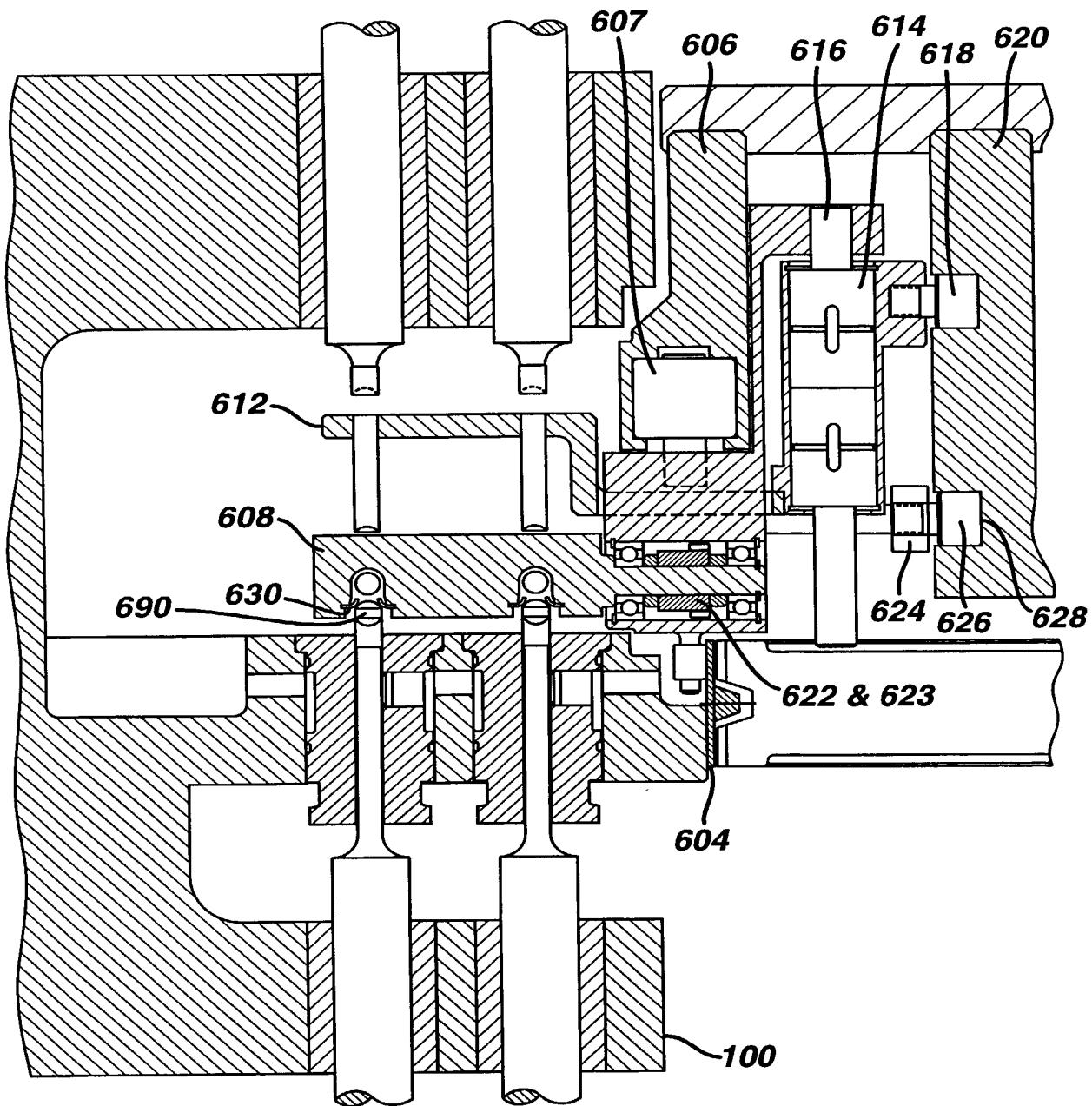
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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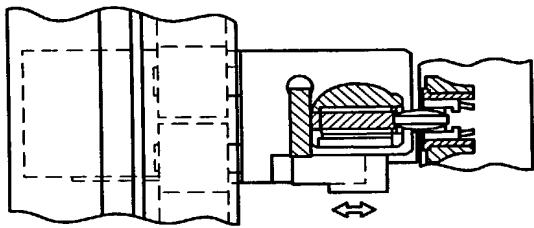
**FIG. 79**



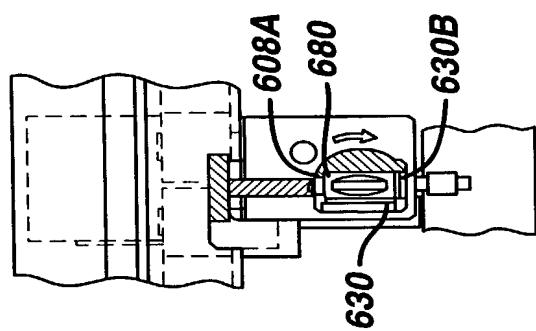
**FIG. 80**



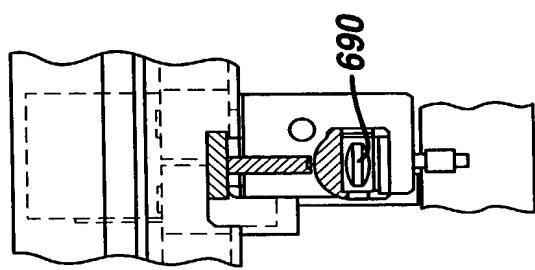
*FIG. 81D*



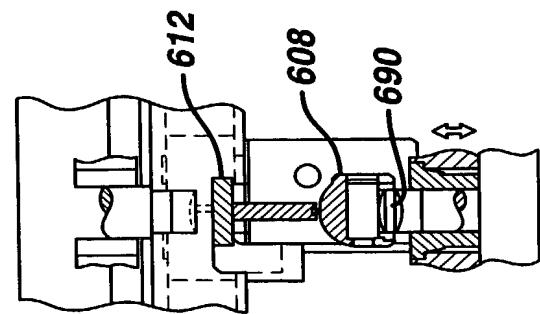
*FIG. 81C*



*FIG. 81B*



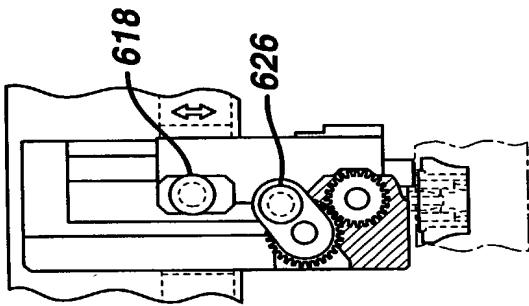
*FIG. 81A*



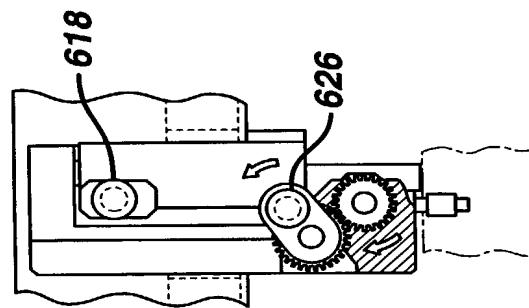
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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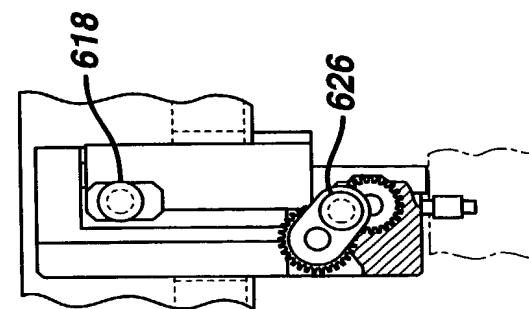
**FIG. 81G**



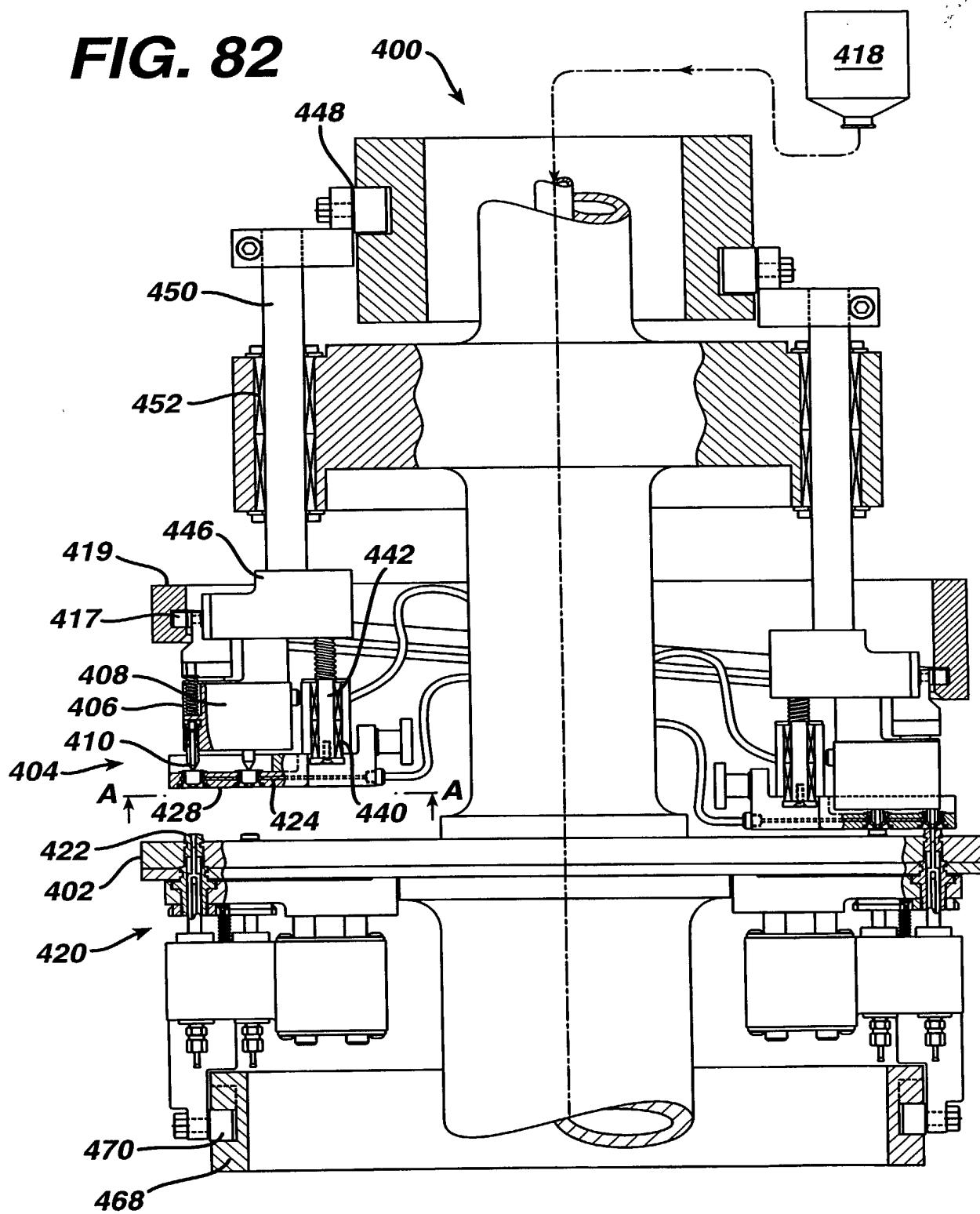
**FIG. 81F**



**FIG. 81E**



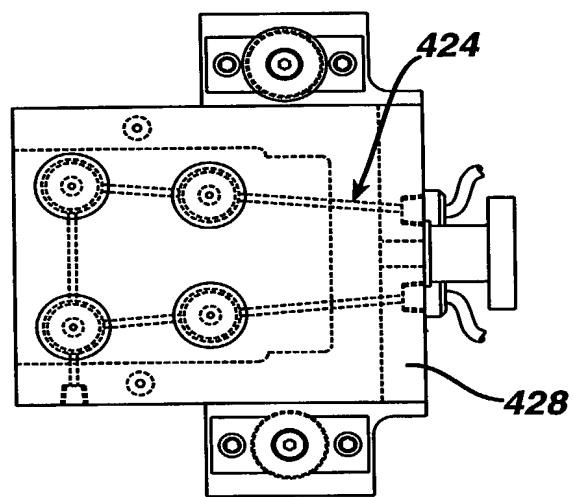
**FIG. 82**



**TITLE:** Systems, Methods and Apparatuses for...  
**INVENTOR(S):** Sowden, et al.  
**APP#:** 09/966939  
**ATTY:** S. E. Hayner      **TEL. #:** 732-524-2242  
**DOCKET #:** MCP-0242      **CUST. #:** 000027777

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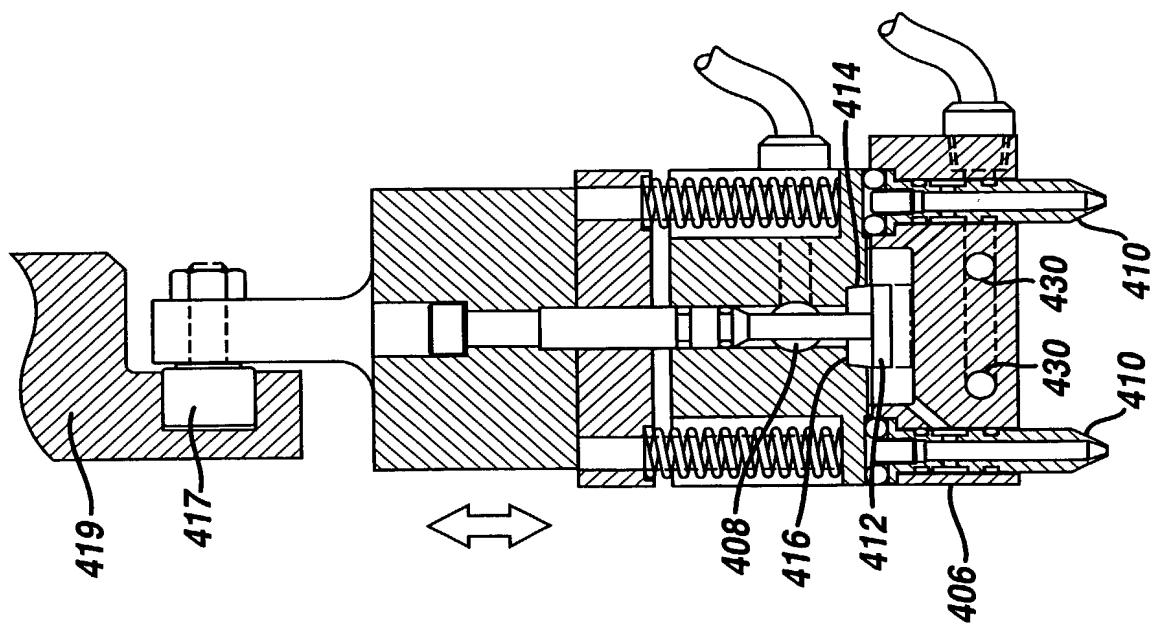
**FIG. 82A**



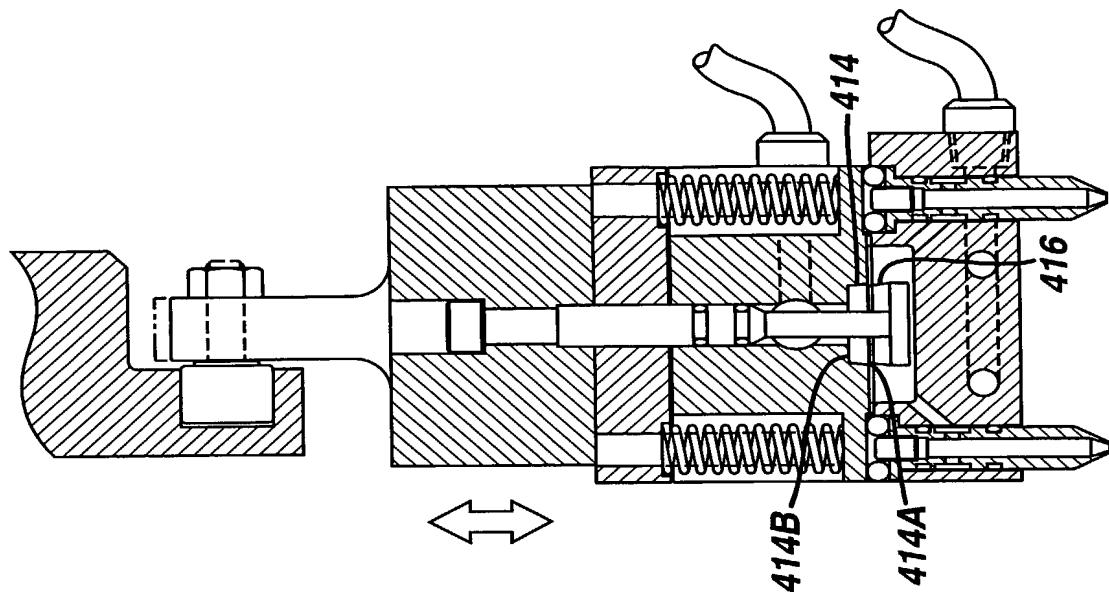
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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**FIG. 83**



**FIG. 84**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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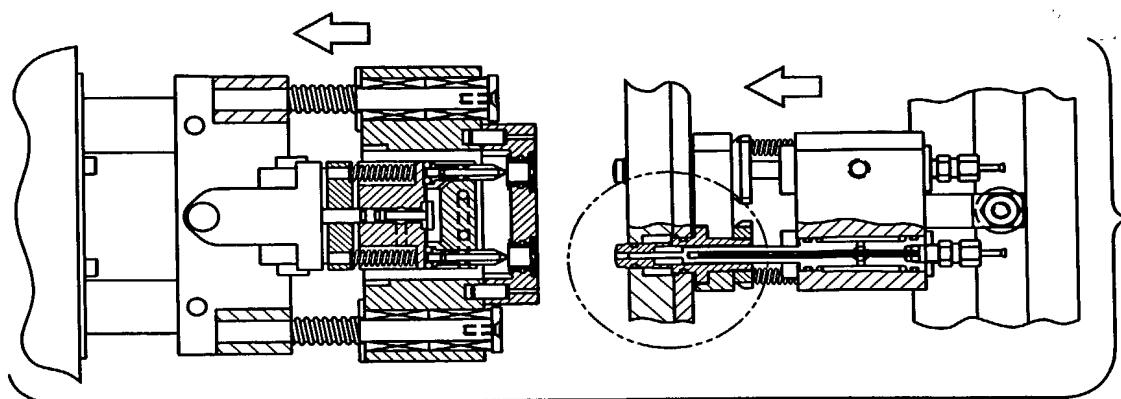


FIG. 85D

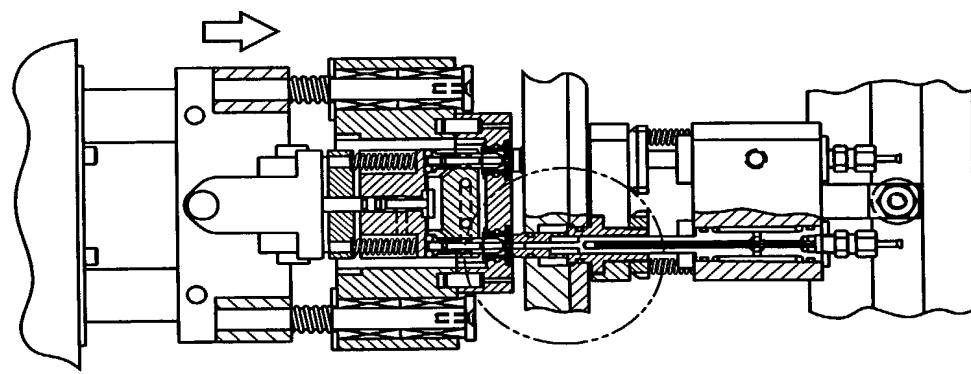


FIG. 85C

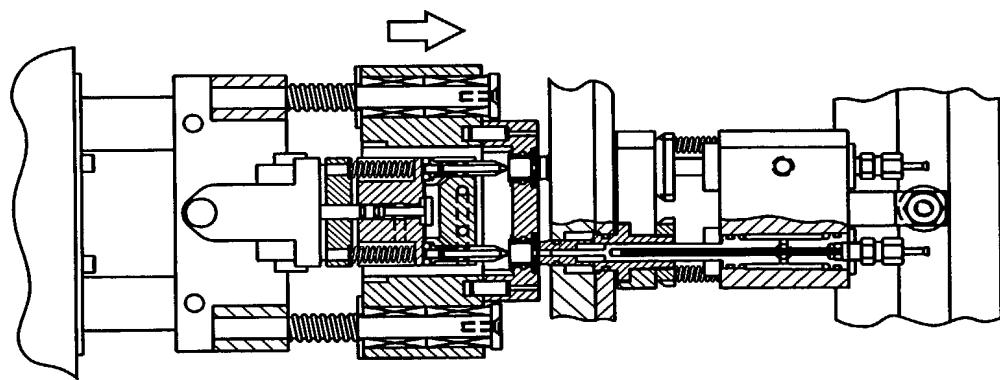


FIG. 85B

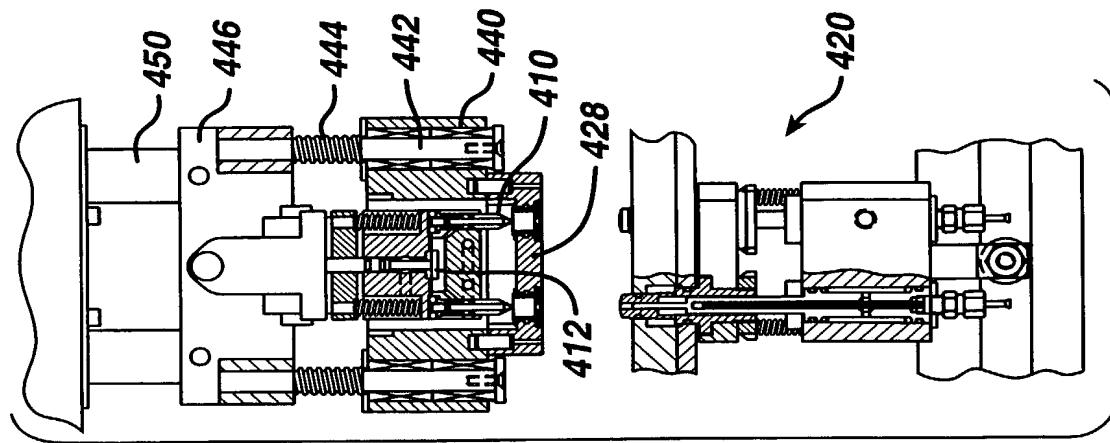
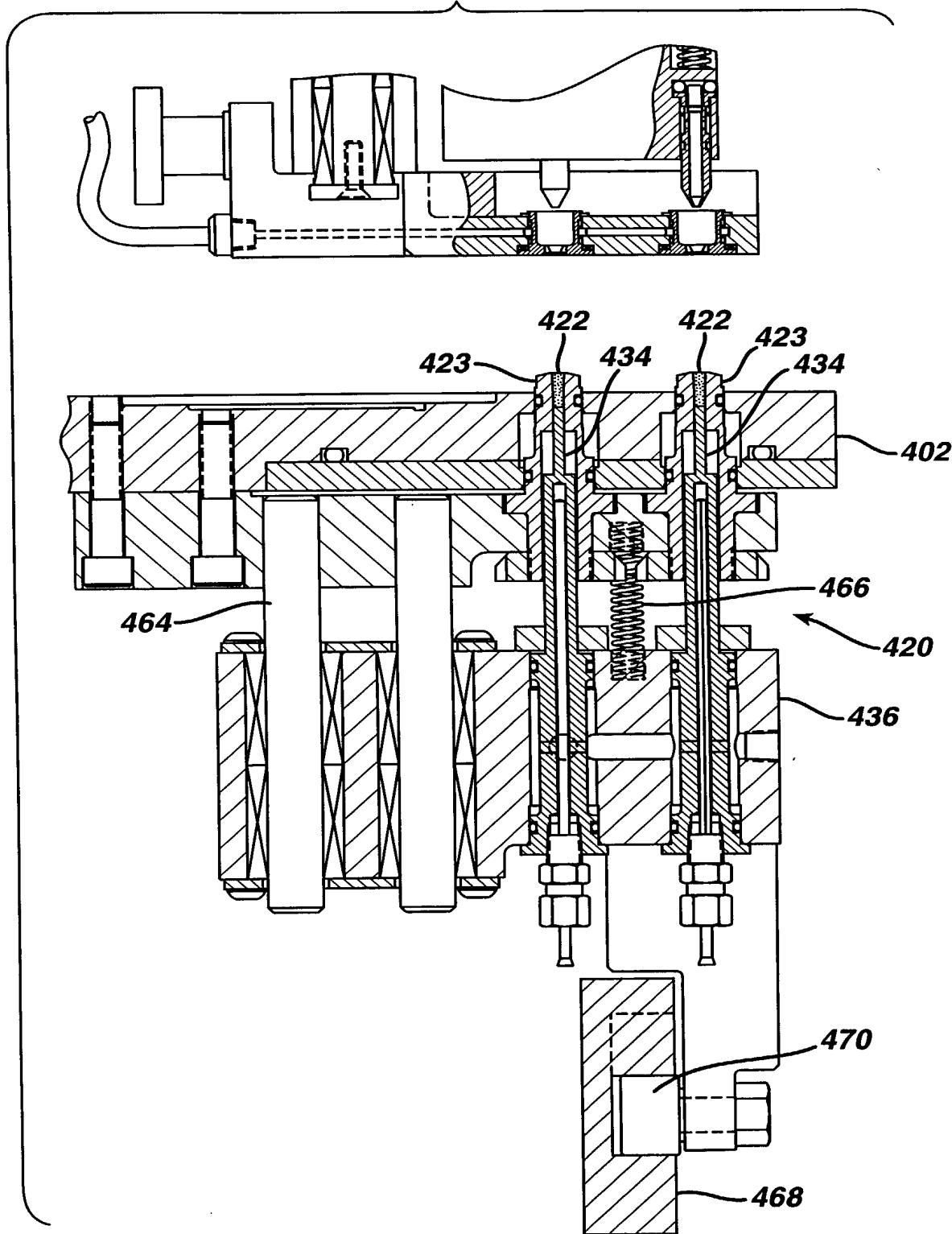


FIG. 85A

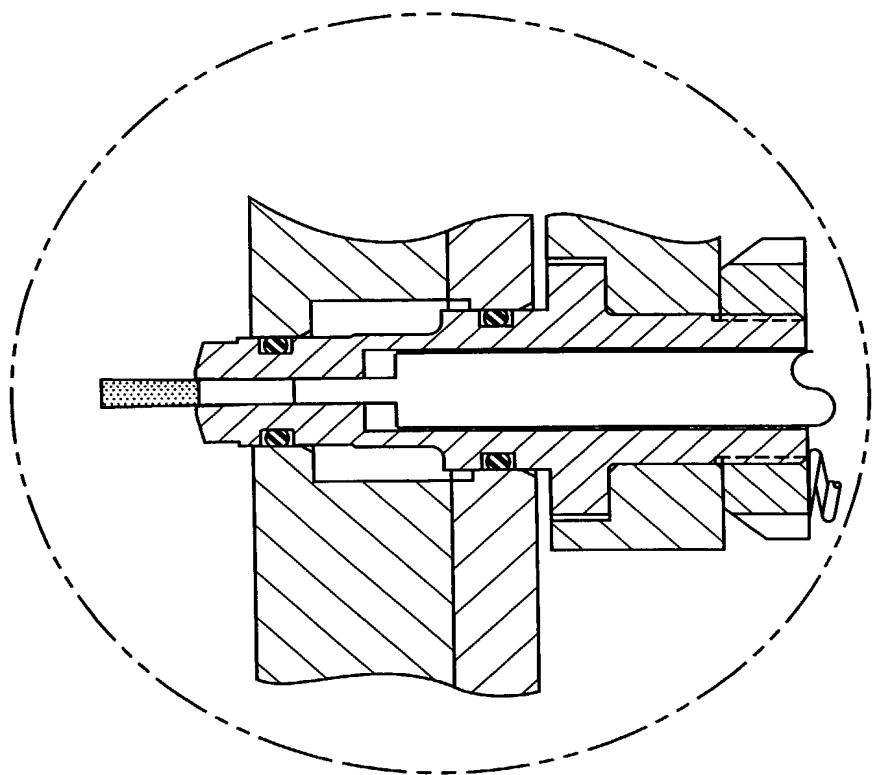
**FIG. 86**



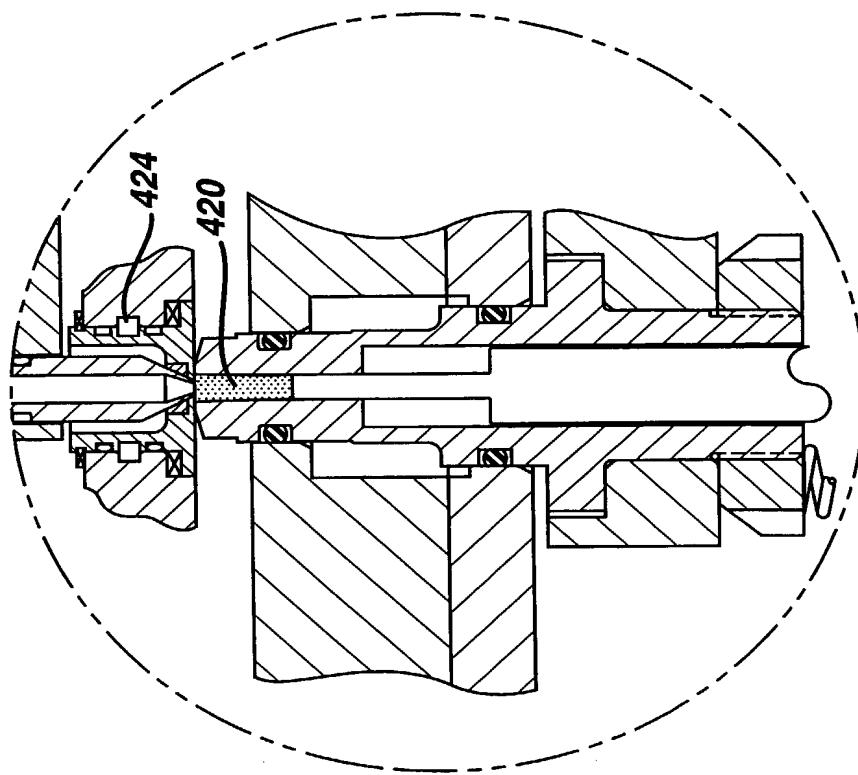
TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner TEL. #: 732-524-2242  
DOCKET #: MCP-0242 CUST. #: 000027777

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**FIG. 88**



**FIG. 87**



TITLE: Systems, Methods and Apparatuses for...  
INVENTOR(S): Sowden, et al.  
APP#: 09/966939  
ATTY: S. E. Hayner      TEL. #: 732-524-2242  
DOCKET #: MCP-0242      CUST. #: 000027777

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## FIG. 89

